INFORMATION SHEET

CODE ANALYSIS

APPLICABLE CODES						
	Year		Year			
International Building Code	2006	National Electrical Code _	2005			
International Mechanical Code	2006	Uniform Code for				
International Fuel Gas Code	2006	Building Conservation _				
International Plumbing Code	2006	ADA Accessibility				
International Fire Code	2006	Guildelines ICC/AN	SI 117.1 2003			
International Energy						
Conservation Code	2006	_				

A. Occupancy and Group: <u>UNLIMITED</u> - COVERED MALL BUILDING _____ __ Mixed Occupancy: Yes _____ No ____ Special Use and Occupancy (e.g. High Rise, Covered Mall): COVERED MALL BUILDING

B. Seismic Design Category: D Design Wind Speed: 90 mph

C. Type of Construction (circle one):

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: EXISTING South: EXISTING East: EXISTING West: EXISTING

Nonseparated Uses: ___0__ E. Mixed Occupancies:

F: Sprinklers:

Required: _____ Provided: _____

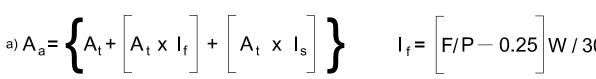
Type of Sprinkler System (IBC 903.3.1) NFPA 13

G: Number of Stories: 3 Building Height: 45'

H: Actual Area per Floor (square feet): FLR 1: 3,000 SF - FLR 2: 27,440 SF

I: Tabular Area: (table 503): N/A - UNLIMITED - COVERED MALL BUILDING

J: Area Modifications:



b) Sum of the Ratio Calculations for Mixed Occupancies:

c) Total Allowable Area for:

1) One Story: _____

2) Two Story: A_a(2)_____ 3) Three Story: A_a(3)

d) Unlimited Area Building: Yes ____ No ____ Code Section: ____402_

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls Interior Bearing Walls Exterior Non-Bearing Walls Structural Frame Partitions - Permanent Fire Barriers	0 0 0 0 N/A N/A		Floors - Ceiling Floors Roofs - Ceiling Roofs Exterior Doors and Windows Shaft Enclosures Fire Walls Fire Partitions Smoke Partitions	0 0 0 1 Hr. N/A N/A N/A	

EXIT TRAVEL DISTANCE (TABLE 1016.1): 300 FEET

L. Design Occupant Load: FLR 1: 30 - FLR 2: 274 - FLR 3: 201 - FLR 4: 399 Exit Width Required: FLR 1: 6" (.2) Exit Width Provided: FLR 1: 32" +60" STAIR

FLR 4: 80" (.2)

FLR 4: 160" +60" STAIR M. Minimum Number of Required Plumbing Facilities: a) Water Closets - Required (m) 6 (f) 6 Provided (m) 6 (f) 6

FLR 3: 160" +120" STAIR

b) Urinals - Required (m) ____3 (f) ___3 Provided (m) ____ (f) ____

c) Lavatories - Required (m) ____4_ (f) ____4_ Provided (m) ___4_ (f) ___4_

d) Bath Tubs or Showers:

e) Drinking Fountains: ___4 Service Sinks: __1

FLR 3: 40" (.2)

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts through $\, \mathbb{Y} \,$ - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:

a) High Rise Requirements.

c) Performance Based Criteria

d) Means or Egress Analysis. e) Fire Assembly Locator Sheet.

f) Exterior and Interior Accessibility Route.

g) Fire Stopping, Including Tested Design Number.

DEFERRED SUBMITTALS:

FIRE SPRINKLER SYSTEMS

ANTICIPATED DATE: OCT. 30, 2008

SHORING/EXCAVATION ANTICIPATED DATE: SEPT. 30, 2008

PROJECT TEAM

OWNER: DFCM Mike Ambre Project Manager 4110 State Office Bldg. Salt Lake City, Utah 84114

STRUCTURAL:

Reinhardt Bsumek

345 South 400 East

phone (801)575-8223

fax (801)532-3778

Salt Lake City, Utah 8411

Bsumek Mu

UVU Facilities Planning James L. Michaelis Associate Vice President 800 West University Parkway phone (801) 209-9104

Orem, Utah 84058-5999 phone (801)863-8776 **MECHANICAL:** Van Boerum & Frank Wade Bennion

Salt Lake City, Utah 84111

330 South 300 East

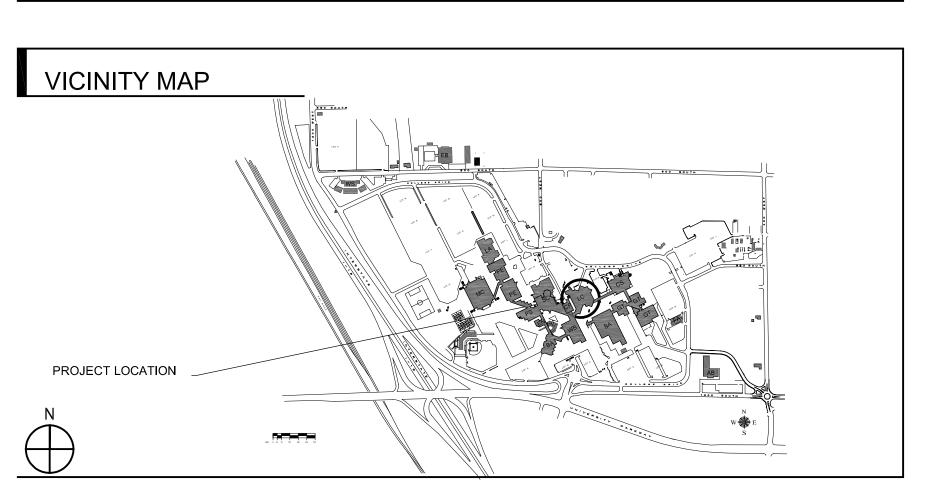
phone (801)530-3150

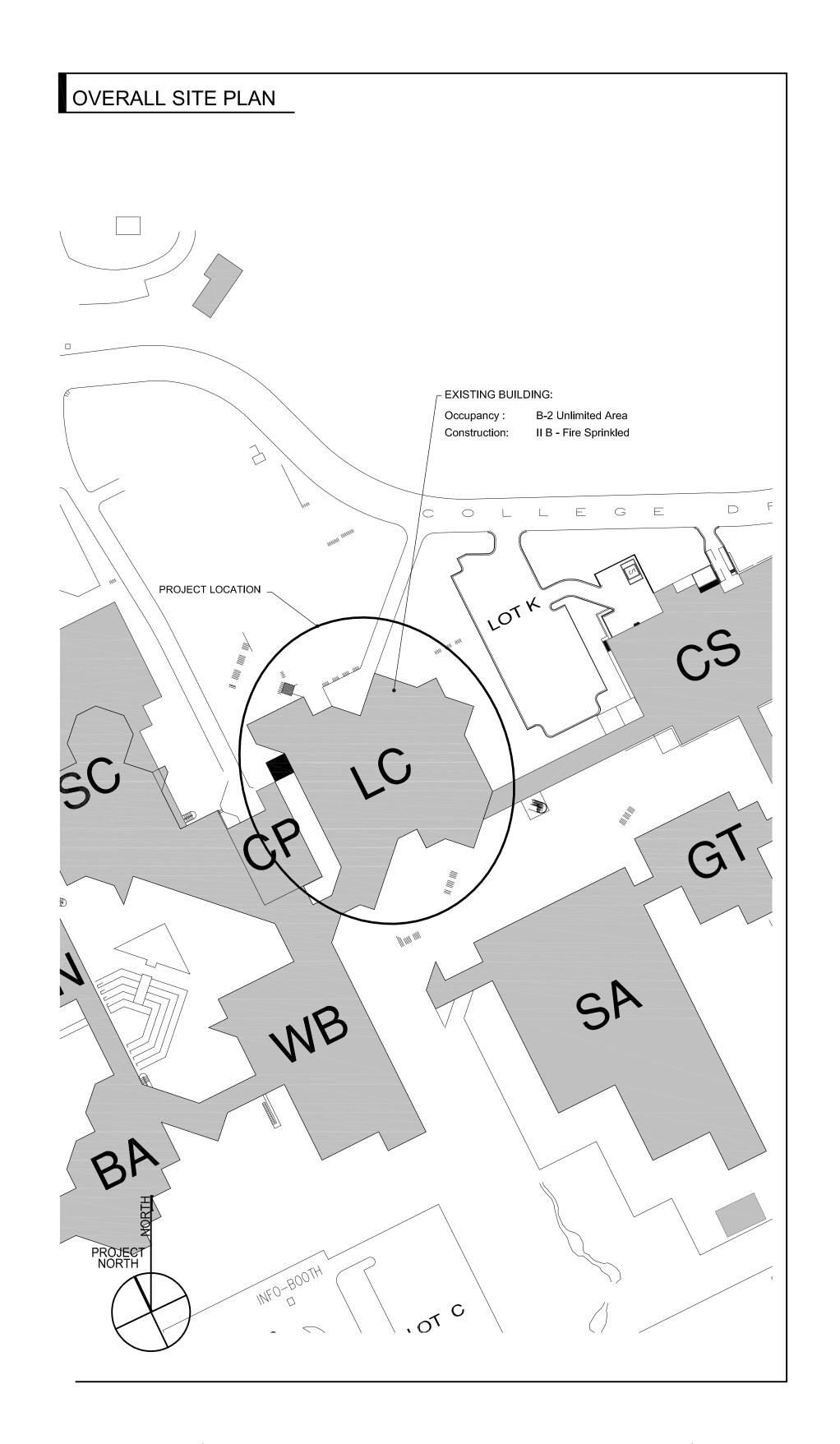
fax (801)674-8617

ARCHITECT: **AXIS ARCHITECTS** Pierre O. Langue AIA 352 S. Denver St. Salt Lake City, UT 84111 phone (801)355-3003 fax (801)355-0113

ELECTRICAL:

BNA Consulting Elaine Fawson 635 S. State Street Salt Lake City, Utah 84111 phone (801)355-3003 fax (801)355-8578





INSULATION CONCRETE

DETAIL

REFERENCE

INT. ELEVATION

WINDOW

NUMBER

EXTERIOR

ELEVATION

GLAZING TYPE

SPOT ELEVATION

MARKER

BUILDING

UTAH VALLEY UNIVERSITY

LINE MATCH

SYMBOL

CEILING TYPE

AND HEIGHT

SYMBOL LEGEND

DOOR SYMBOL DOOR TYPE

FINISH SYMBOL

1ST DIGIT INDICATES

_HARDWARE GROUP

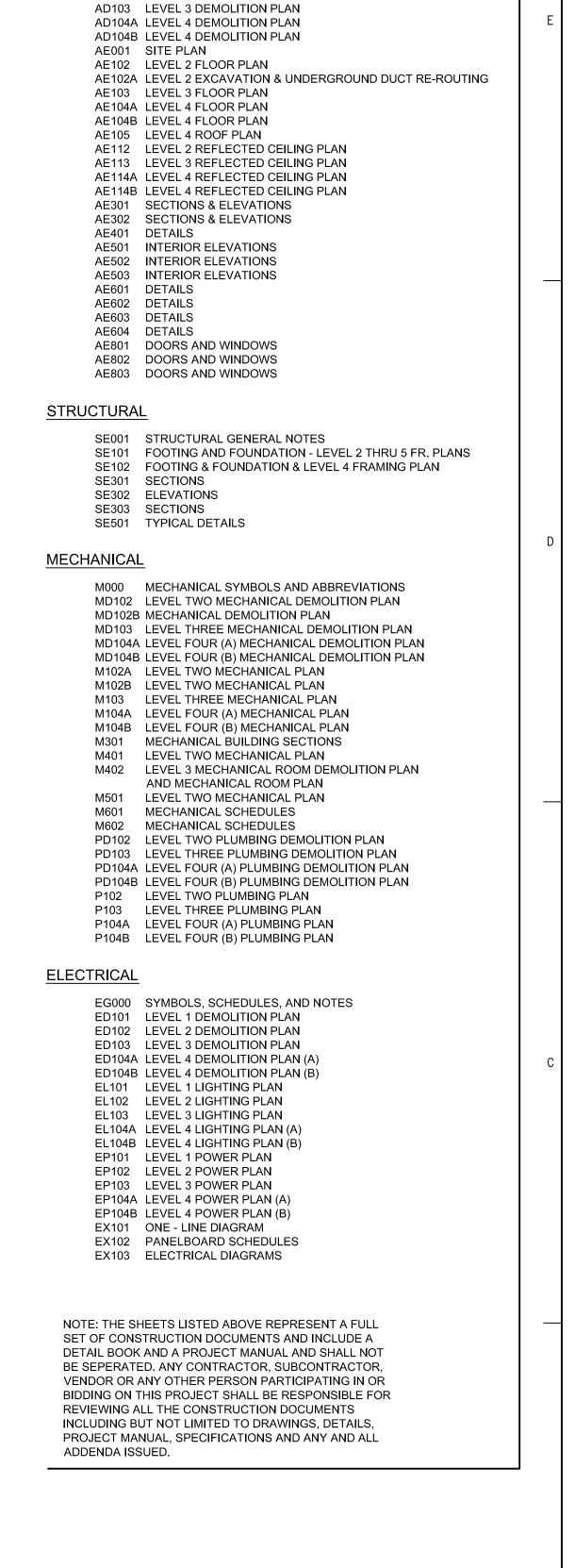
_ NORTH WALL FINISH

__ BASE FINISH

FLOOR FINISH

GRAPHIC SYMBOLS

LOSEE CENTER REMODEL Orem, Utah



DRAWING INDEX

GI101 GENERAL INFORMATION

GI102 OVERALL PLANS & EXITING

AD102 LEVEL 2 DEMOLITION PLAN

DFCM PROJECT # 07196790

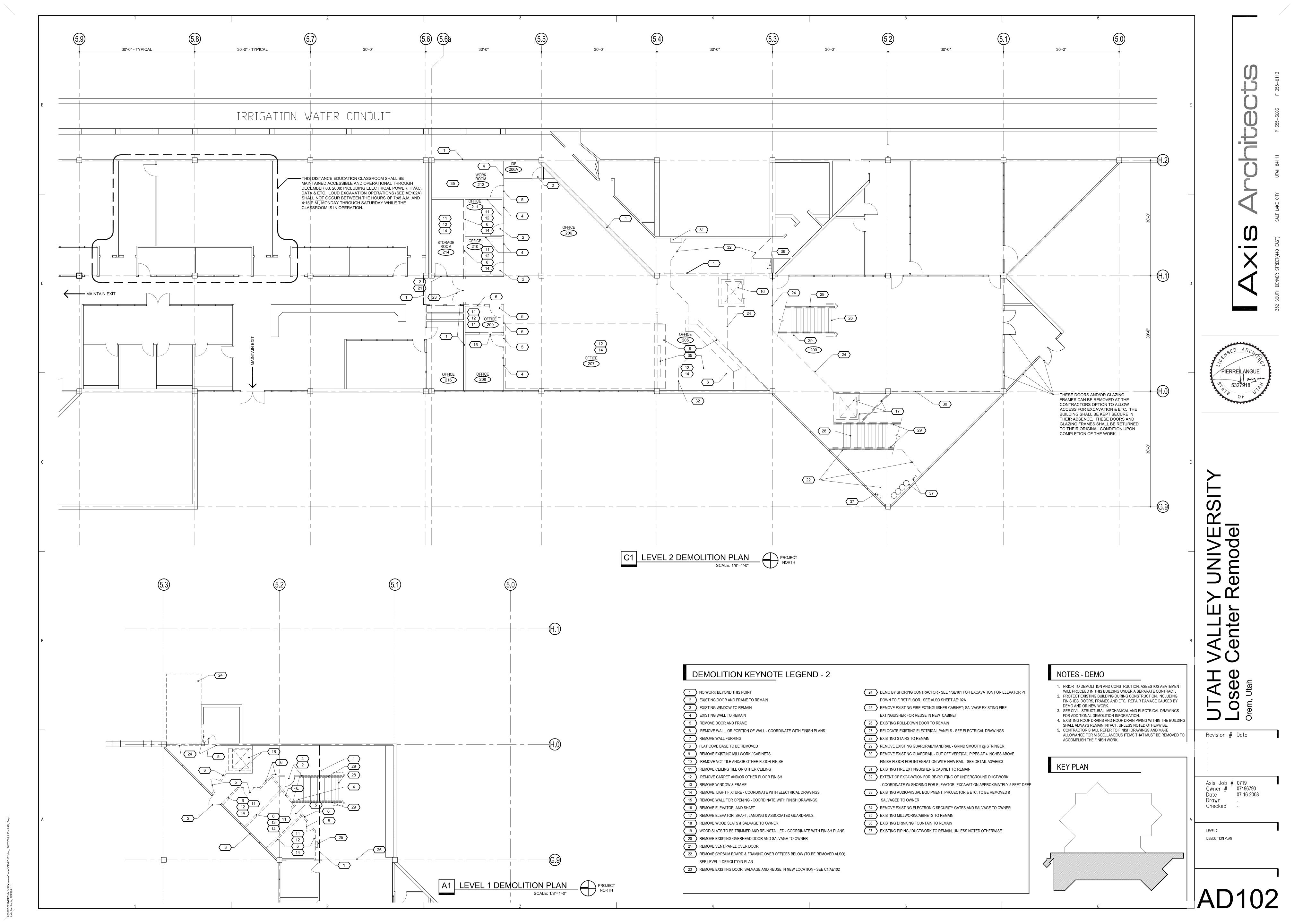


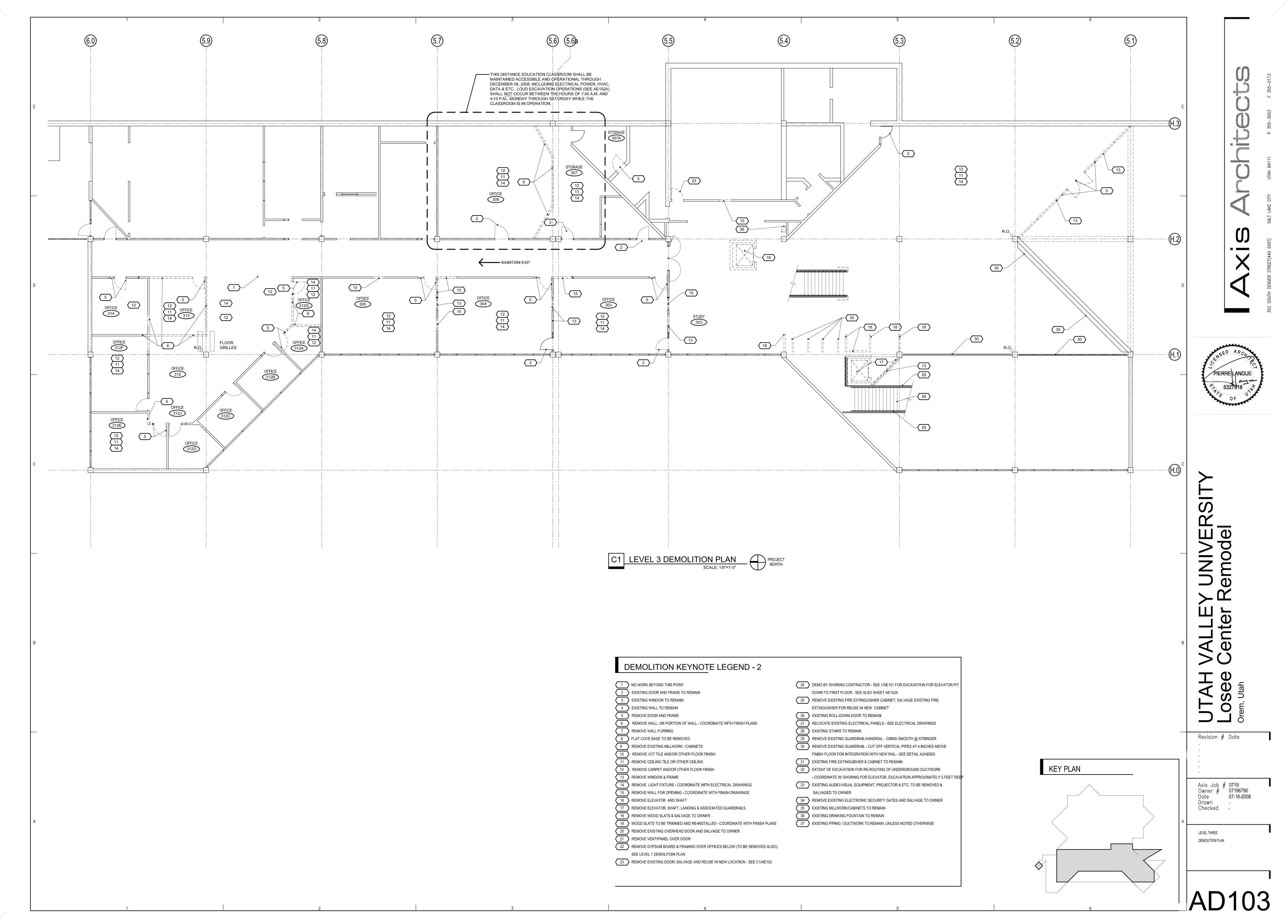
State of Utah Department of Administrative Services

Division of Facilities Construction & Management 4110 State Office Building Salt Lake City, Utah 84114 Phone: (801) 538 - 3018 Fax: (801) 538 - 3267

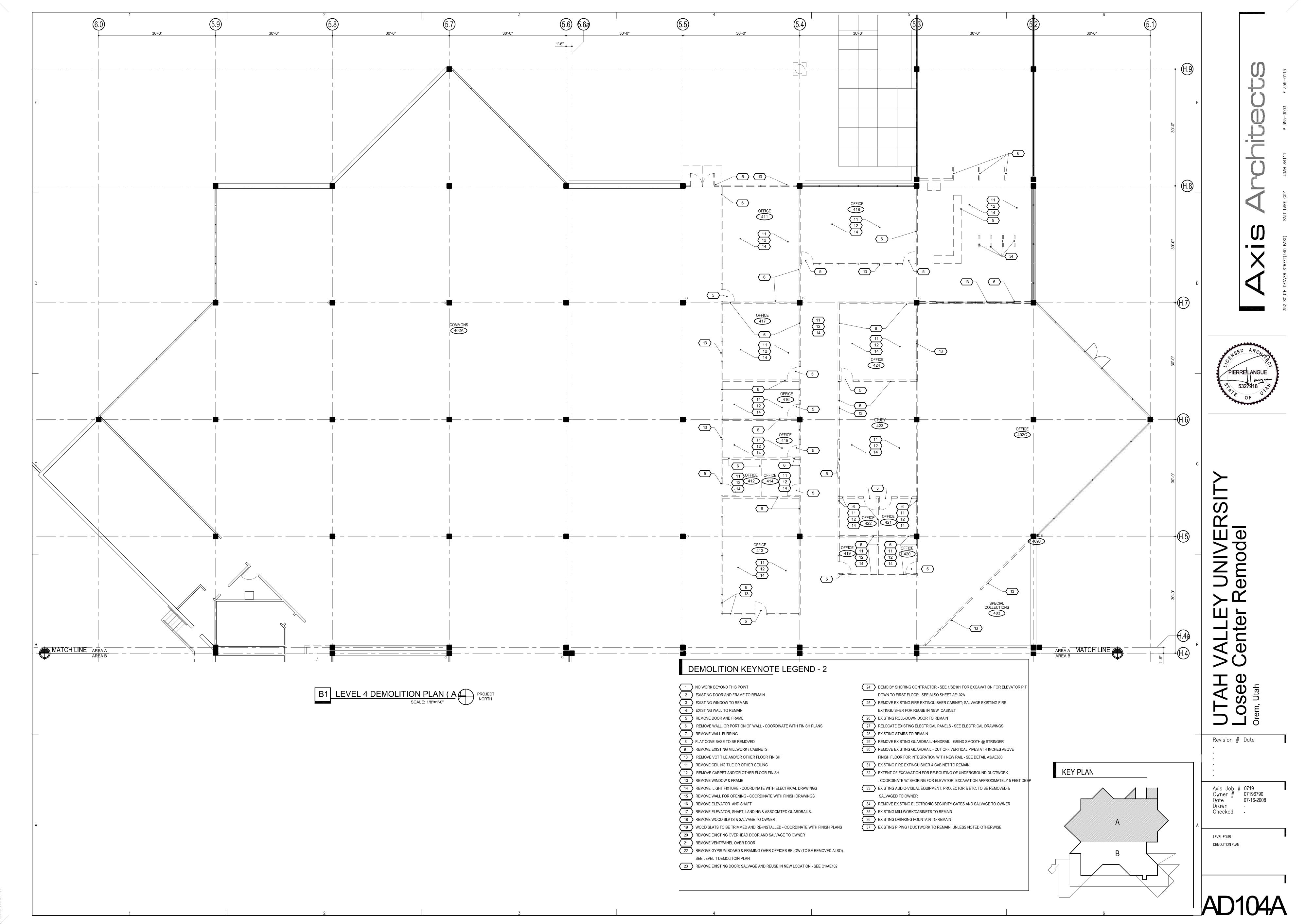
APPROVALS	
Prime Agency	Date
DFCM	

GI101

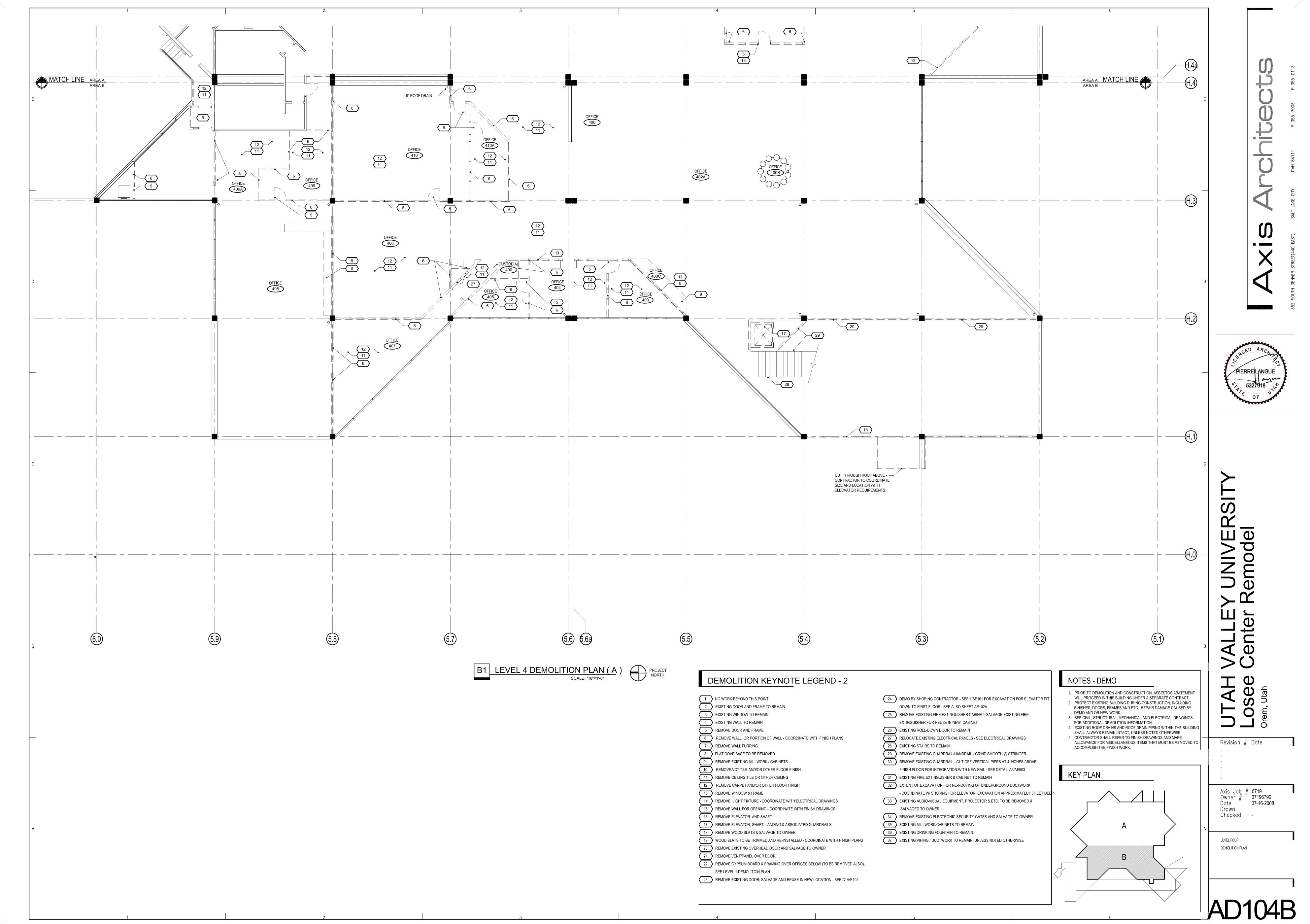




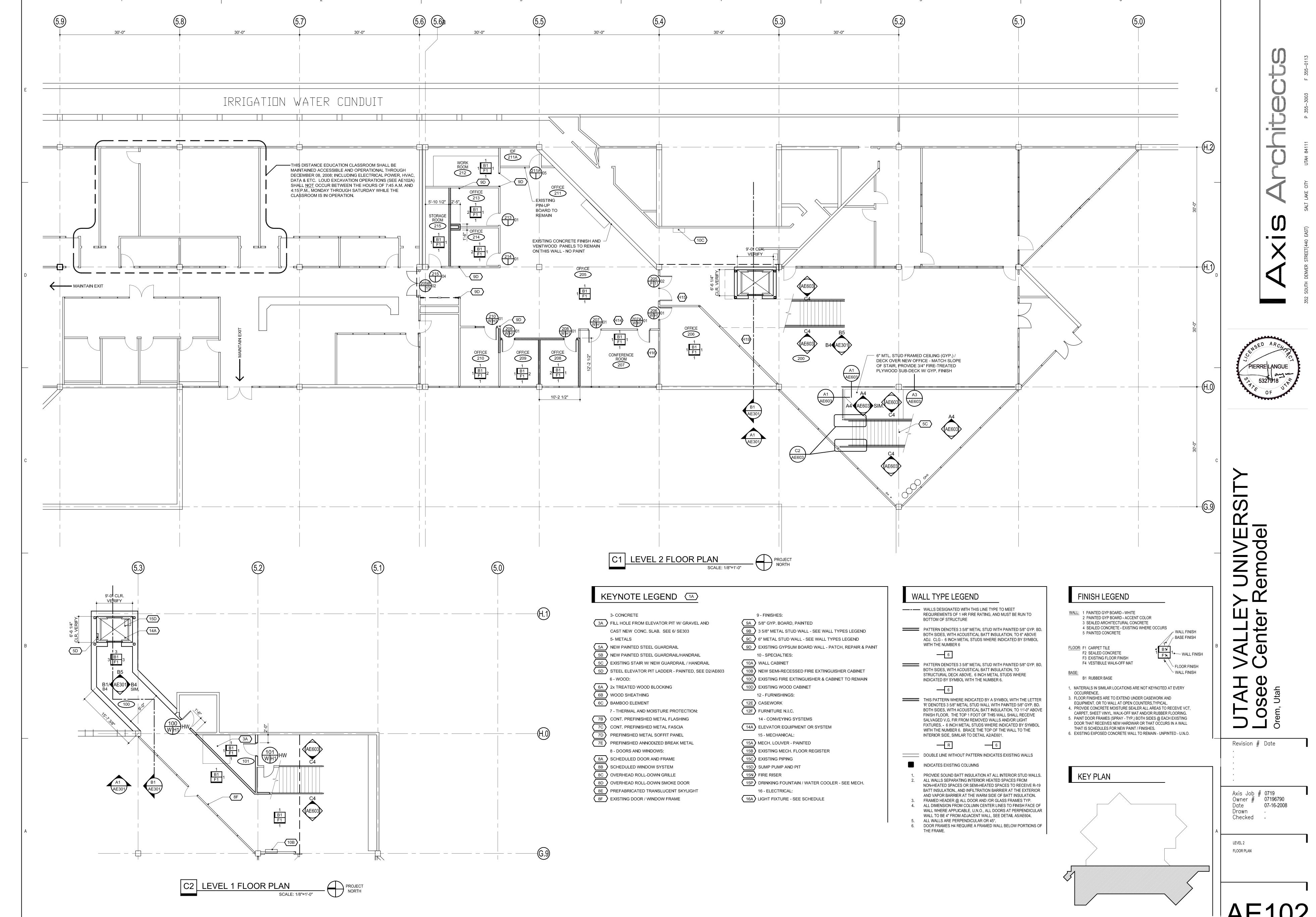
P:\text{2007/07/19-DFCM-UVSC-Losee-Centen/CD\AD103.dwg, 7/17/2008 1;39:39 AM. Boyd .. Axis Architects, PDF995, 1:1.008

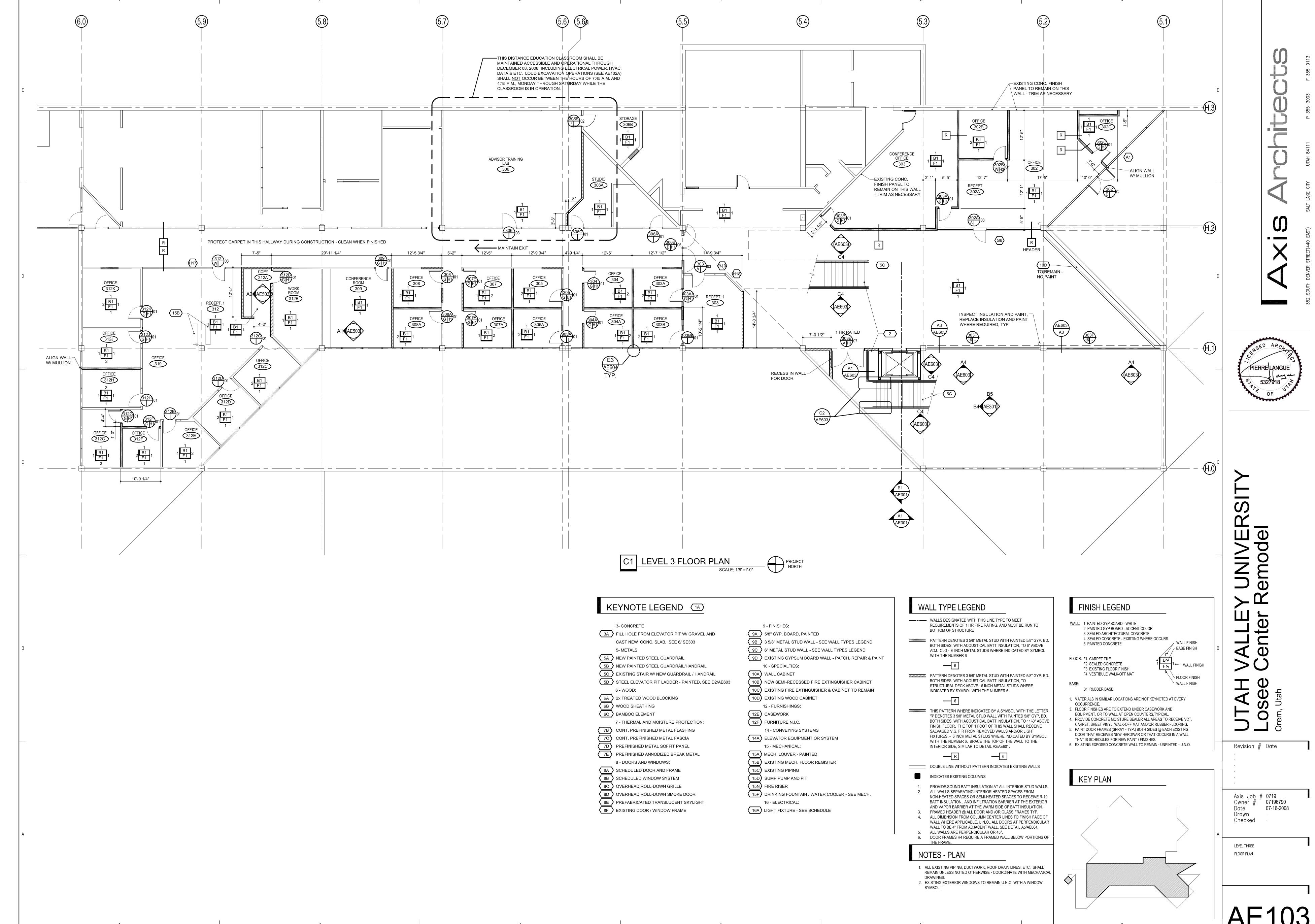


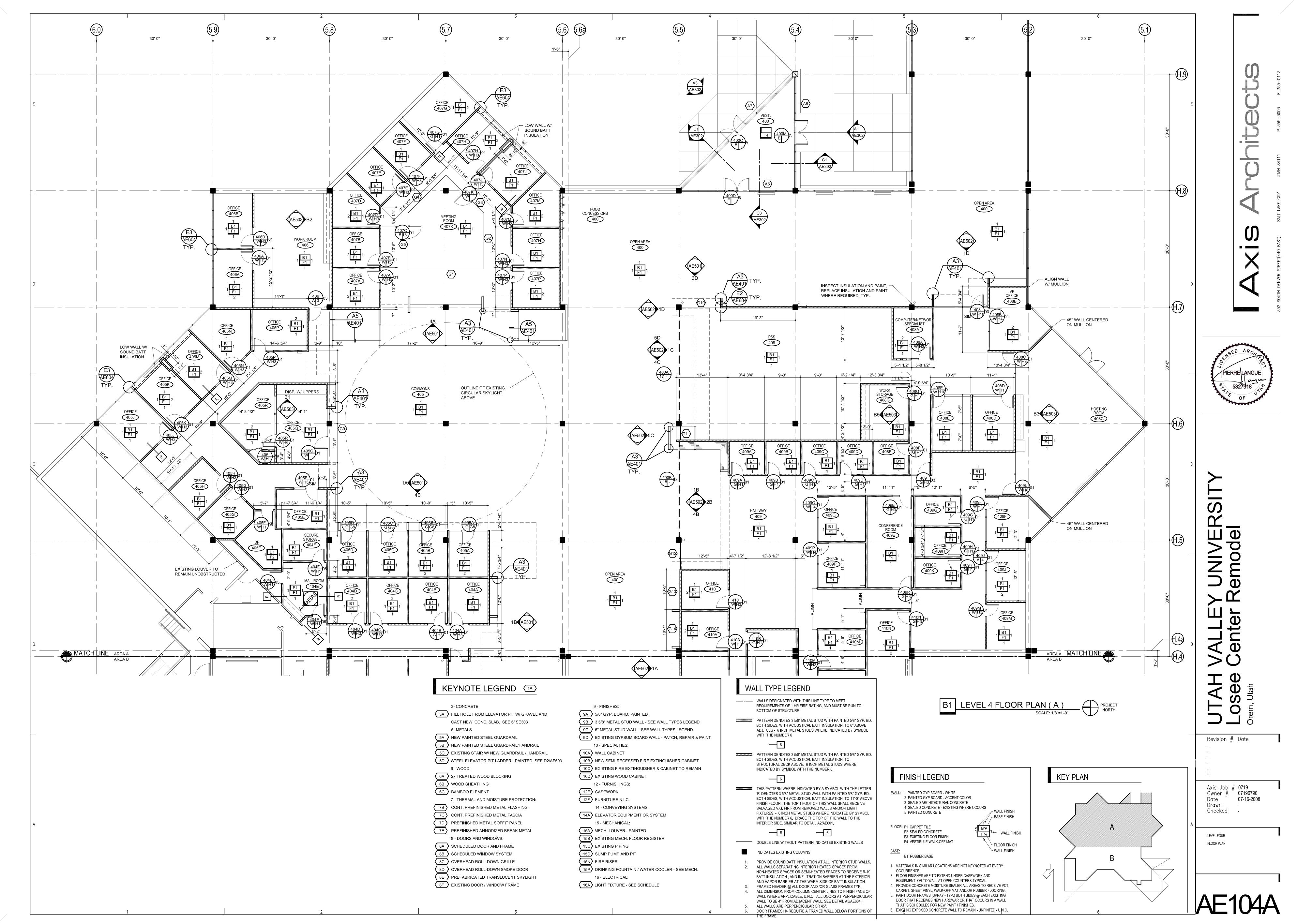
007/0719-DFCM-UVSC-Losee-Centen/CD\AD104A.dwg, 7/17/2008 1;59:41 AM, Boyd ., Architects PDF995 1:1 nn8



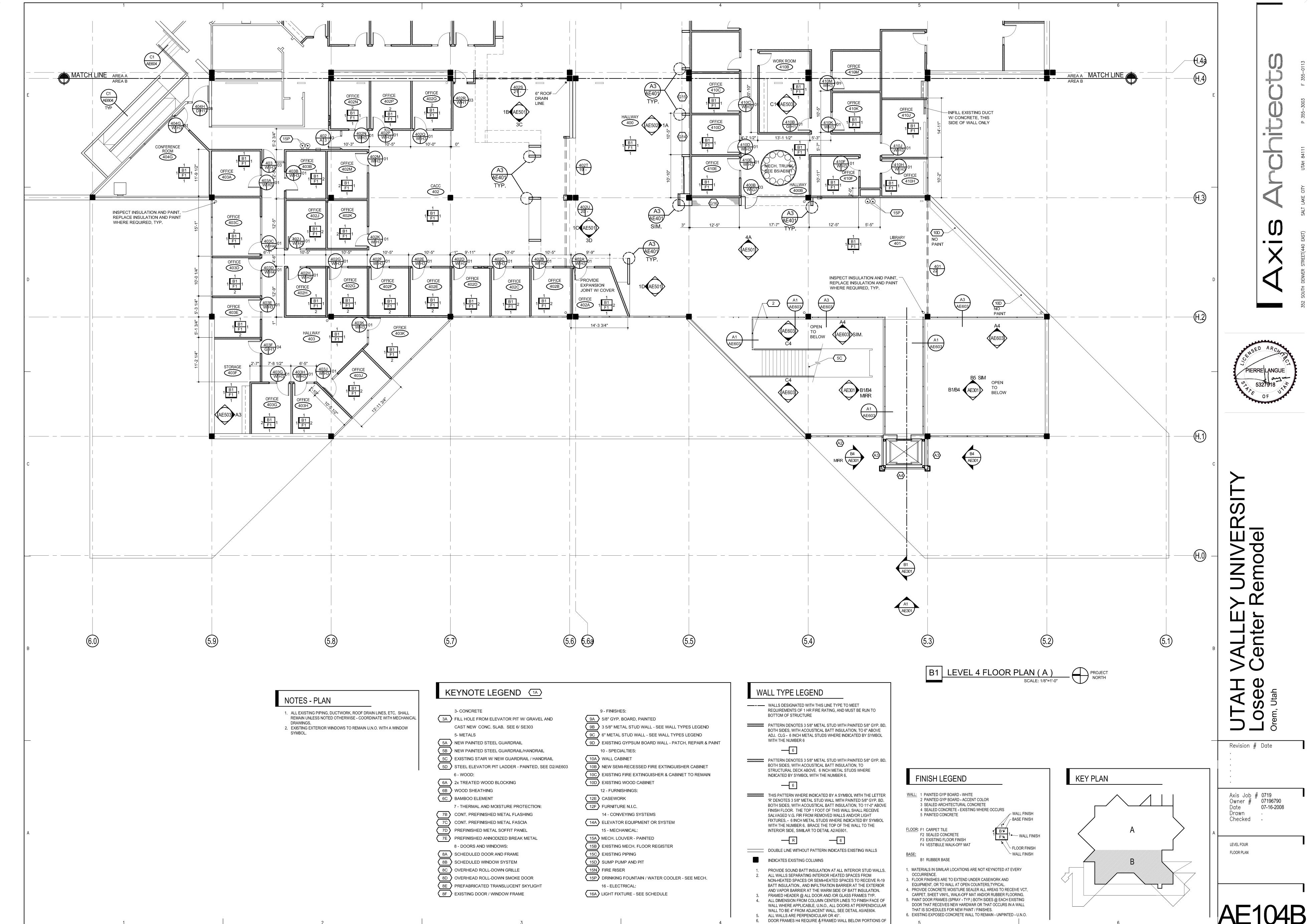
P:\2007\0719-DFCM-UVSC-Losee-Center\CD\AD104B.dwg, 7/17/2008 1:58:50 AM, Boy Axis Architects, PDF995, 1:1.008

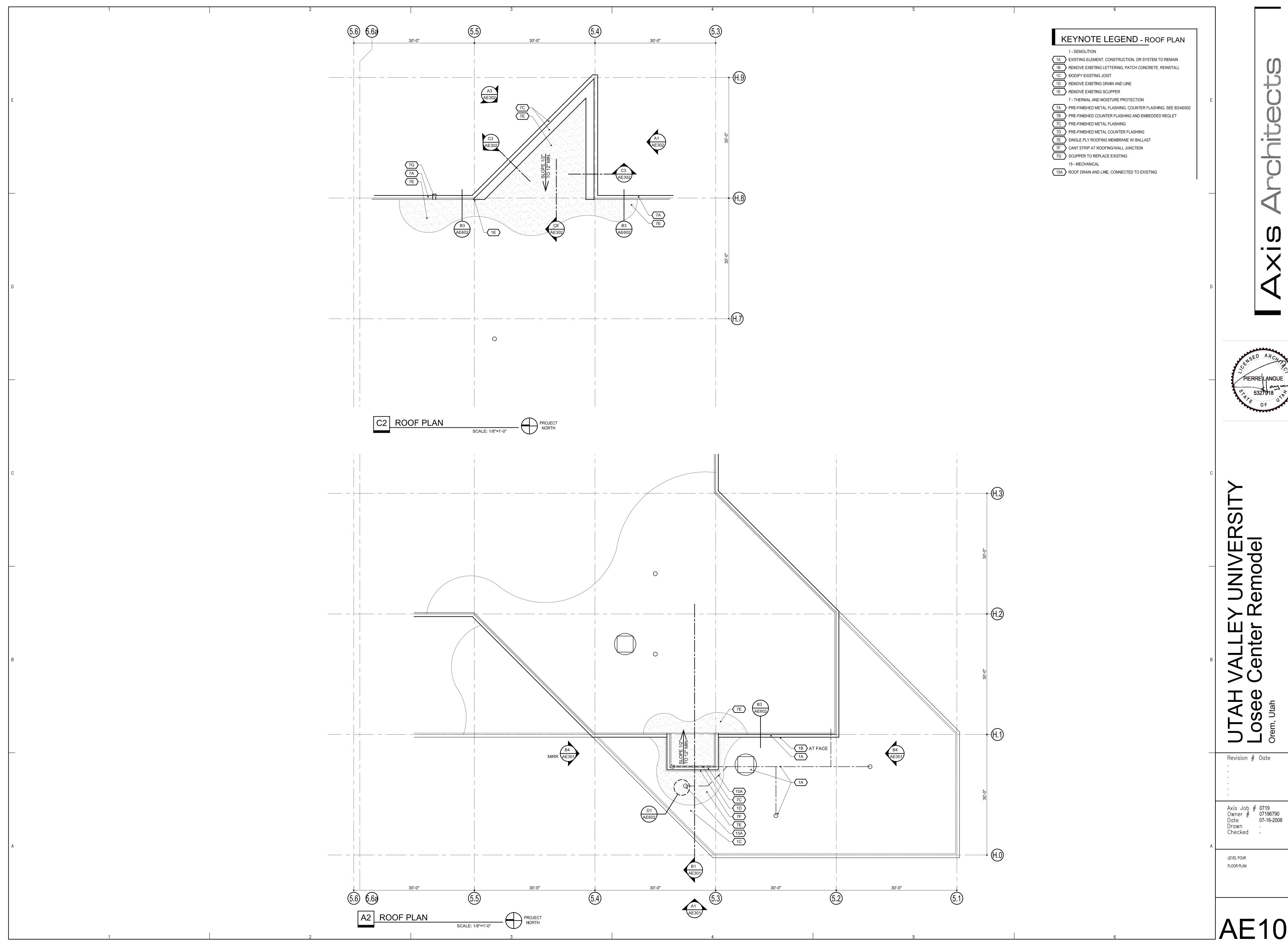




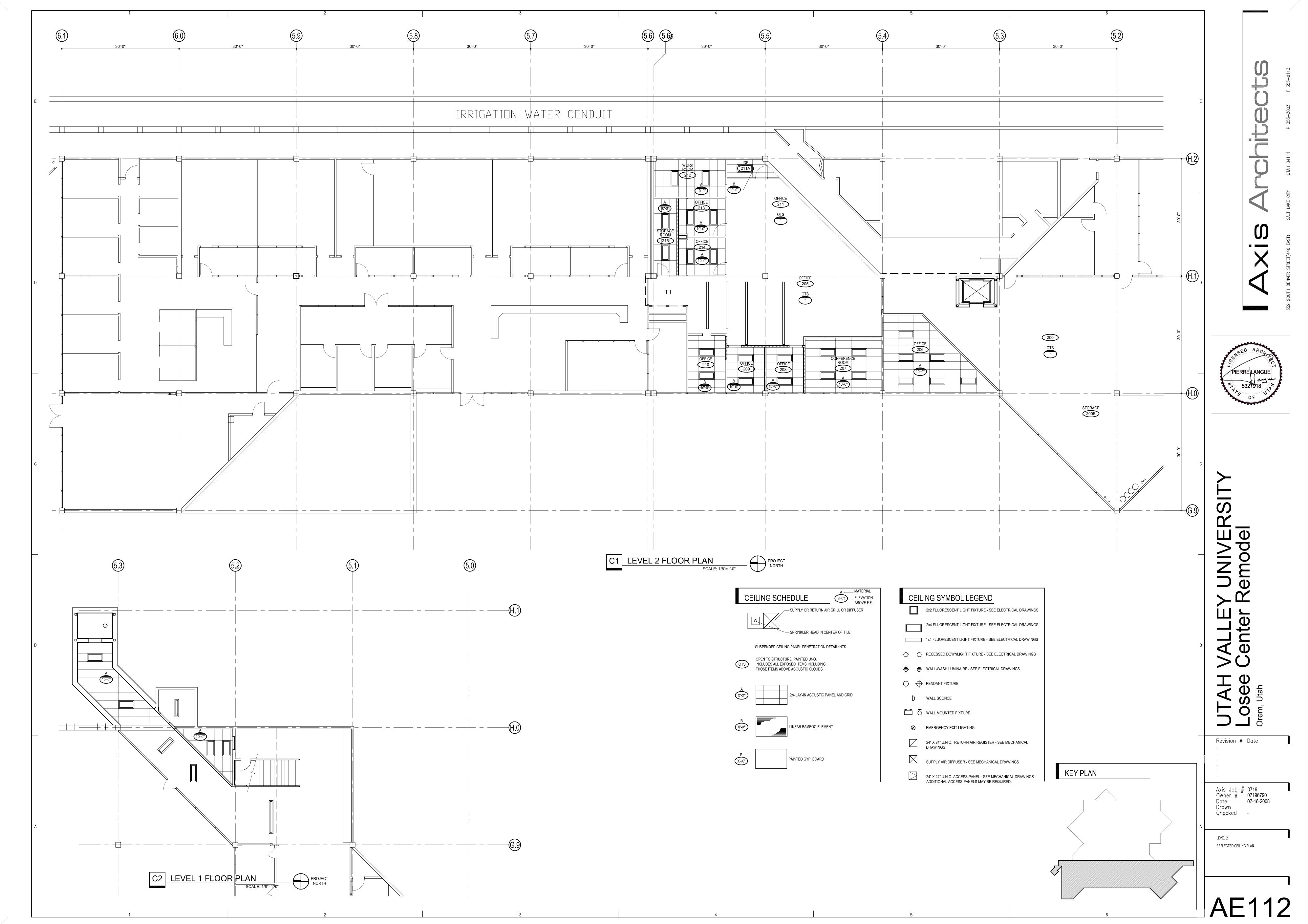


P:\2007\0719-DFCM-UVSC-Losee-Center\CD\AE.104A.dwg, 7/17/2008 1:53:53 AM, Boyd ,, Axis Architects, PDF995, 1:1.008

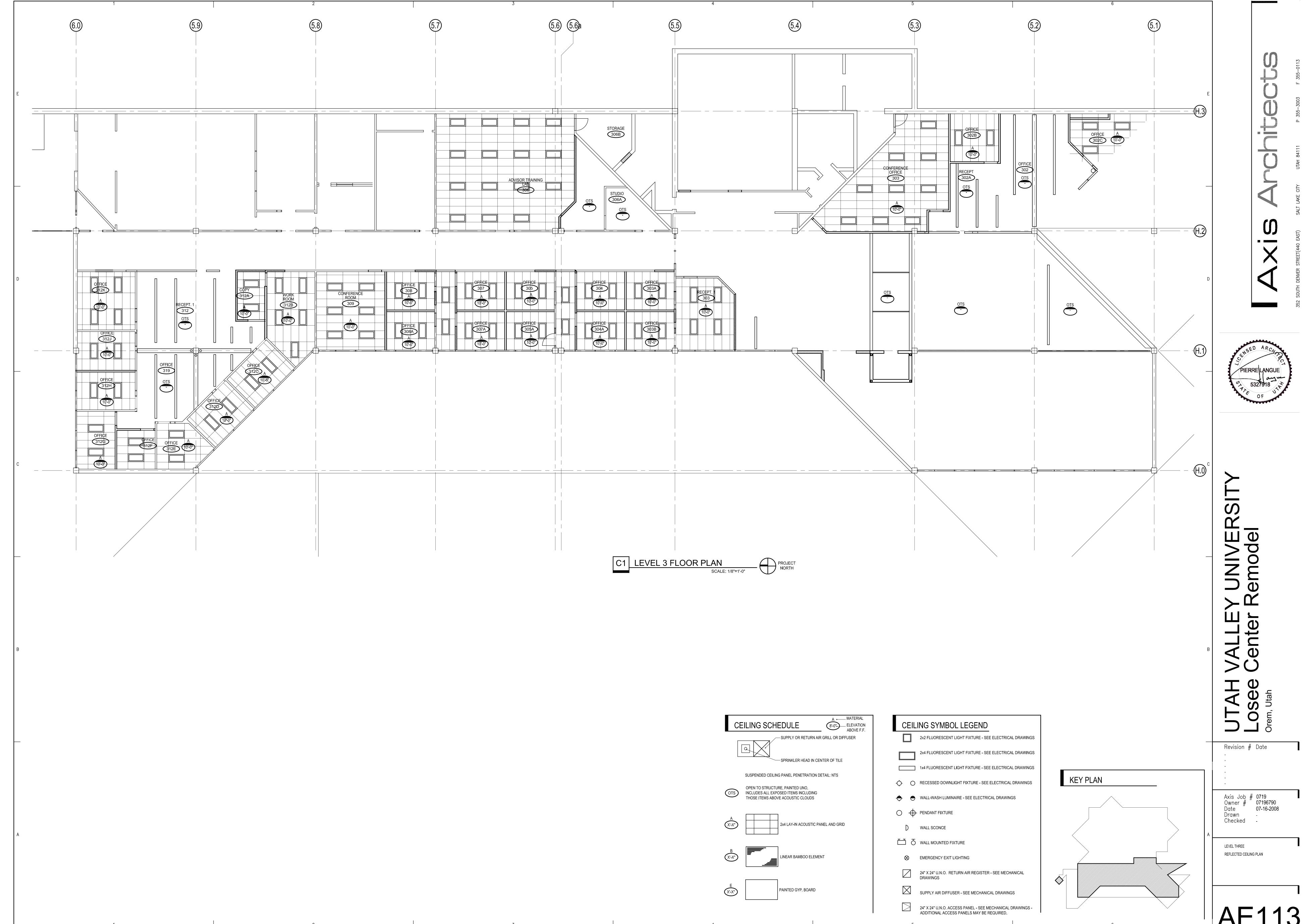


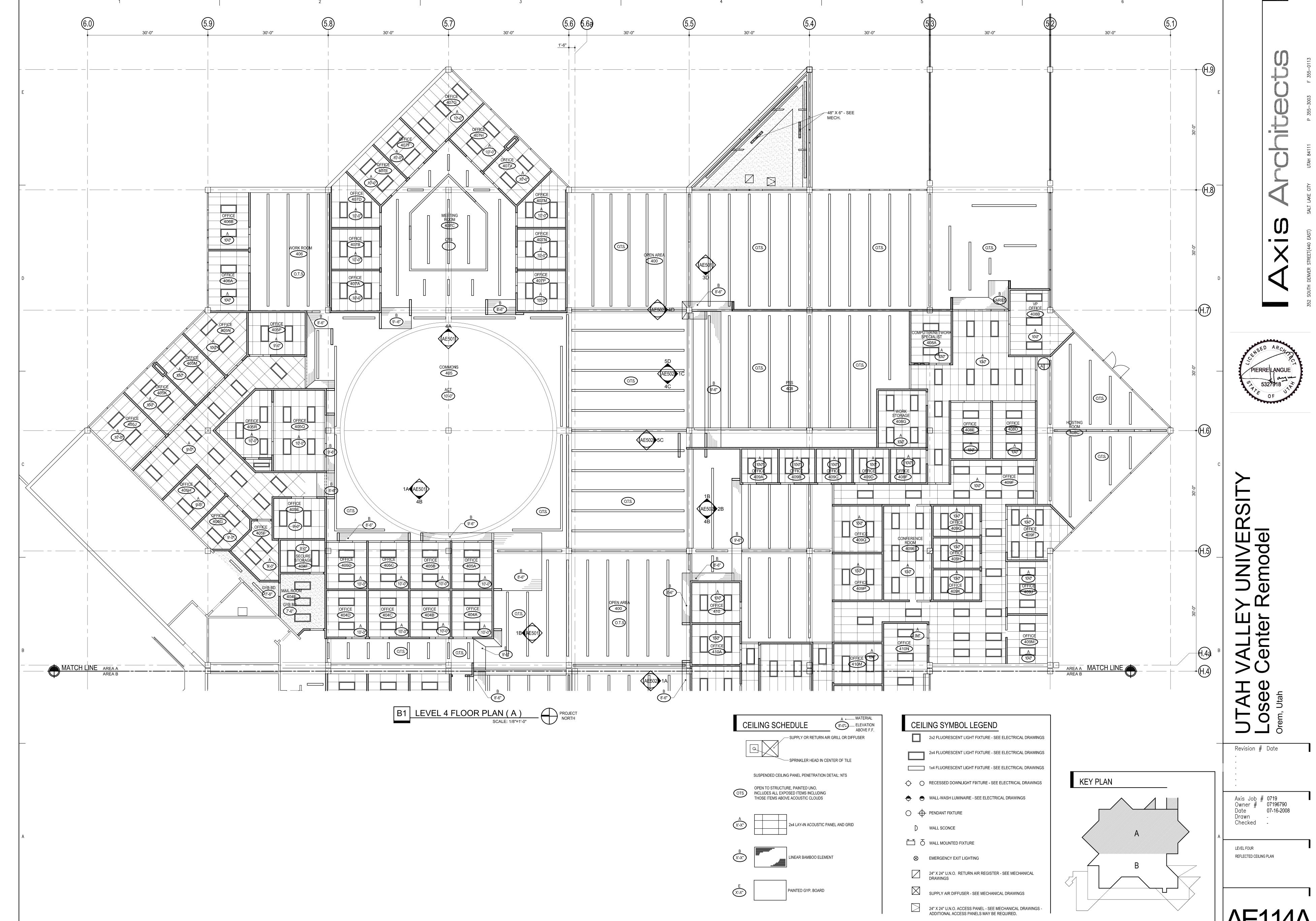


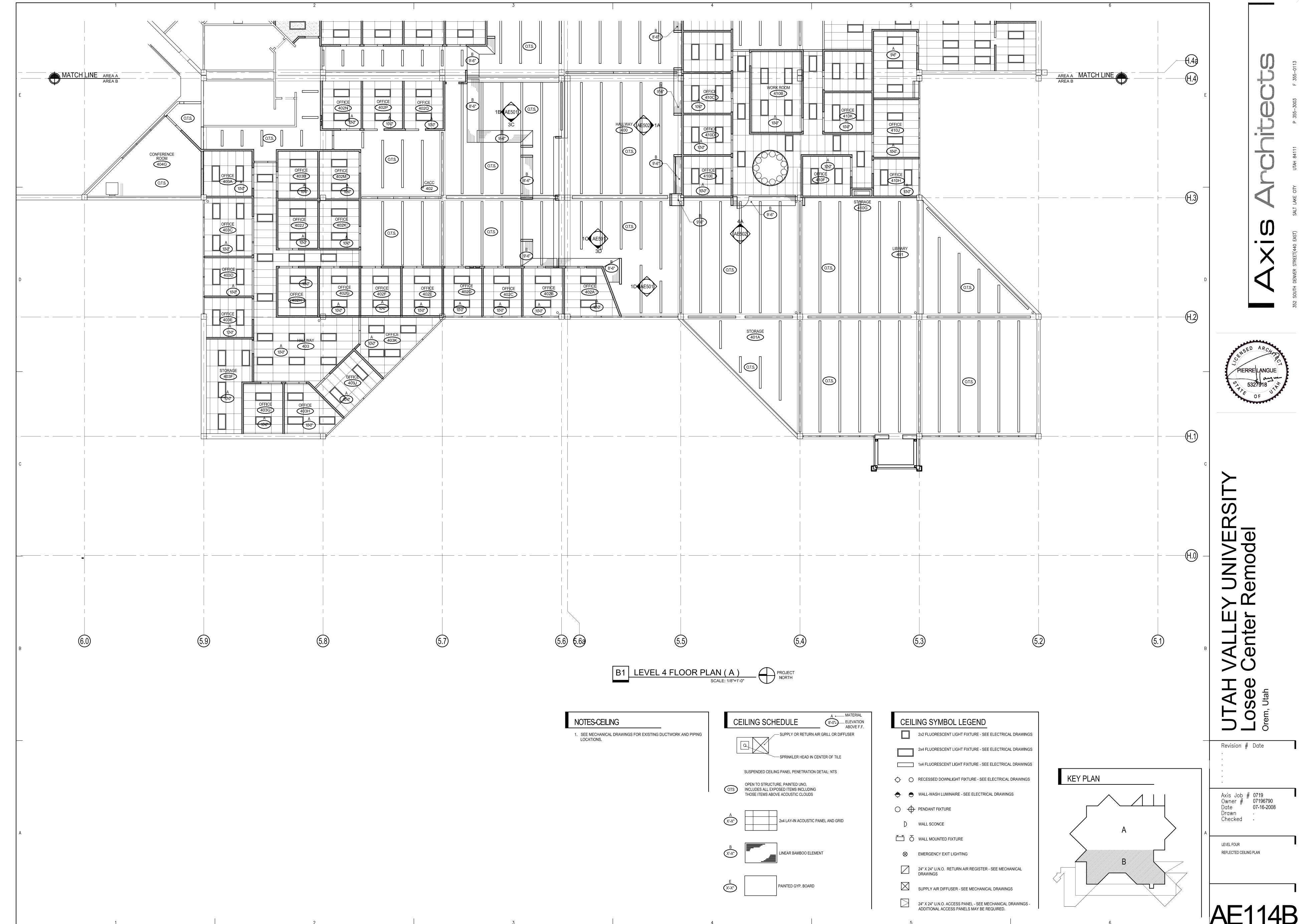
AE105

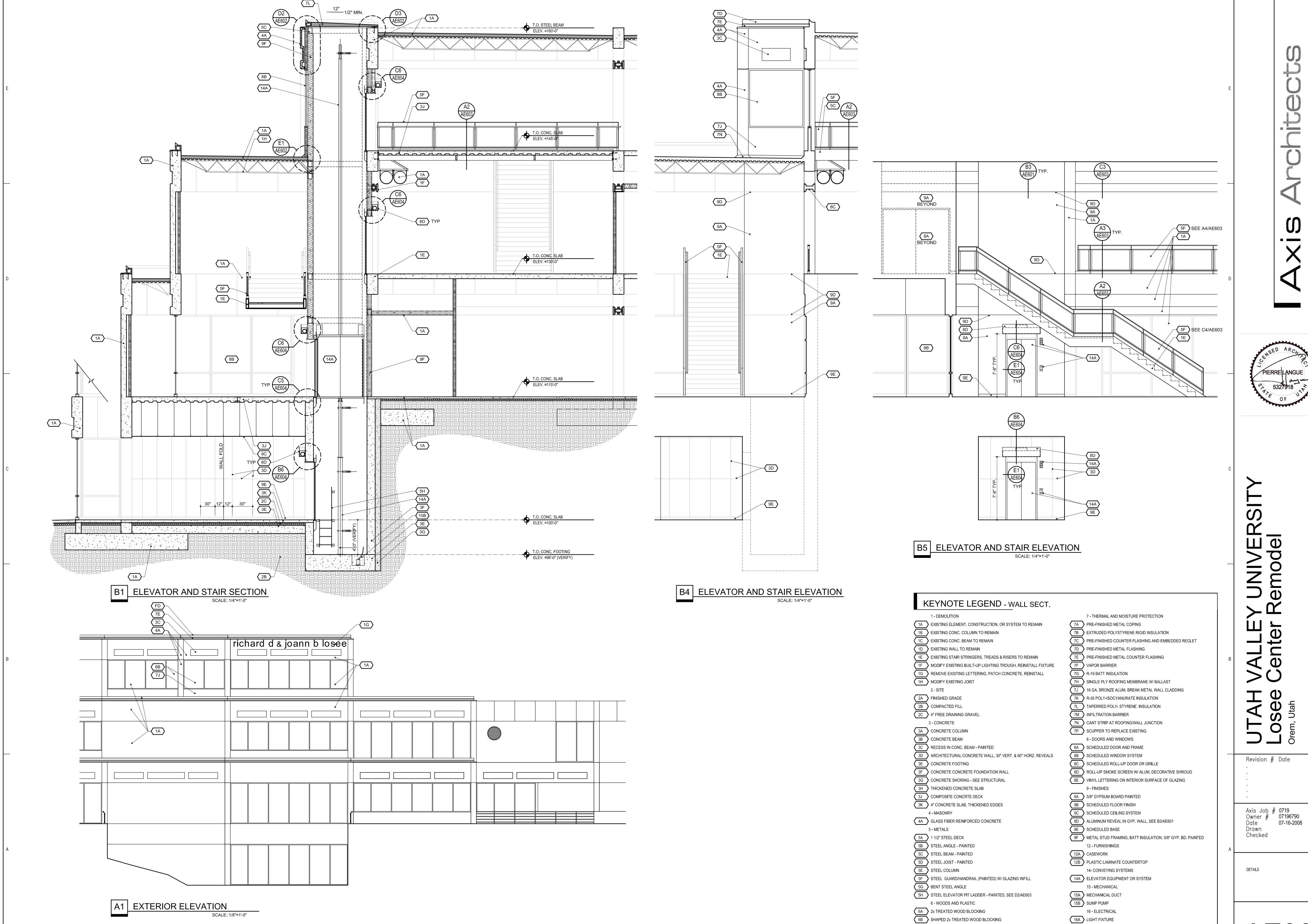


P:\2007\0719-DFCM-UVSC-Losee-Center\CD\AE112.dwg, 7/17/2008 1:45:46 AM, Boyd ,, Axis Architects, PDF995, 1:1.008



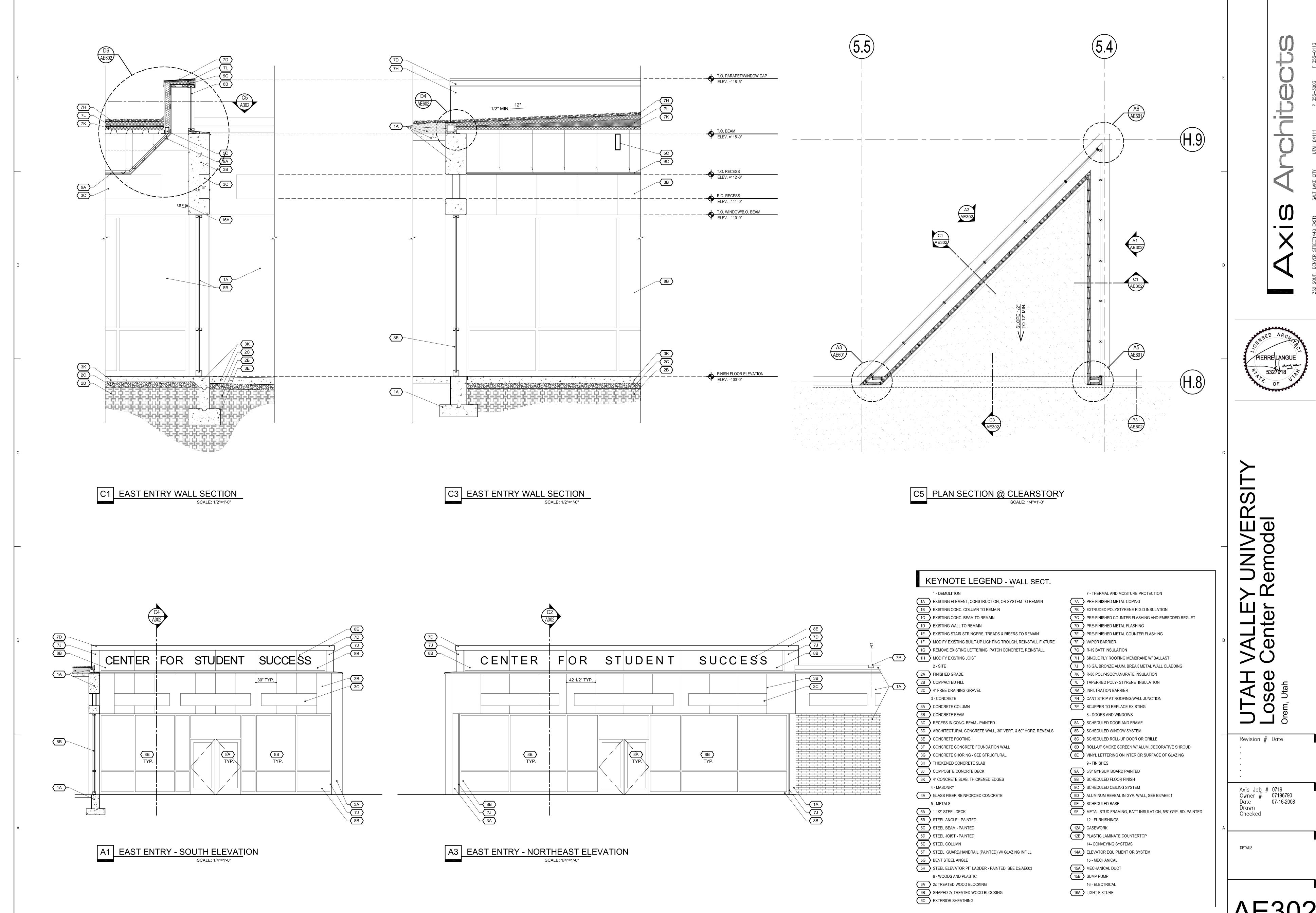






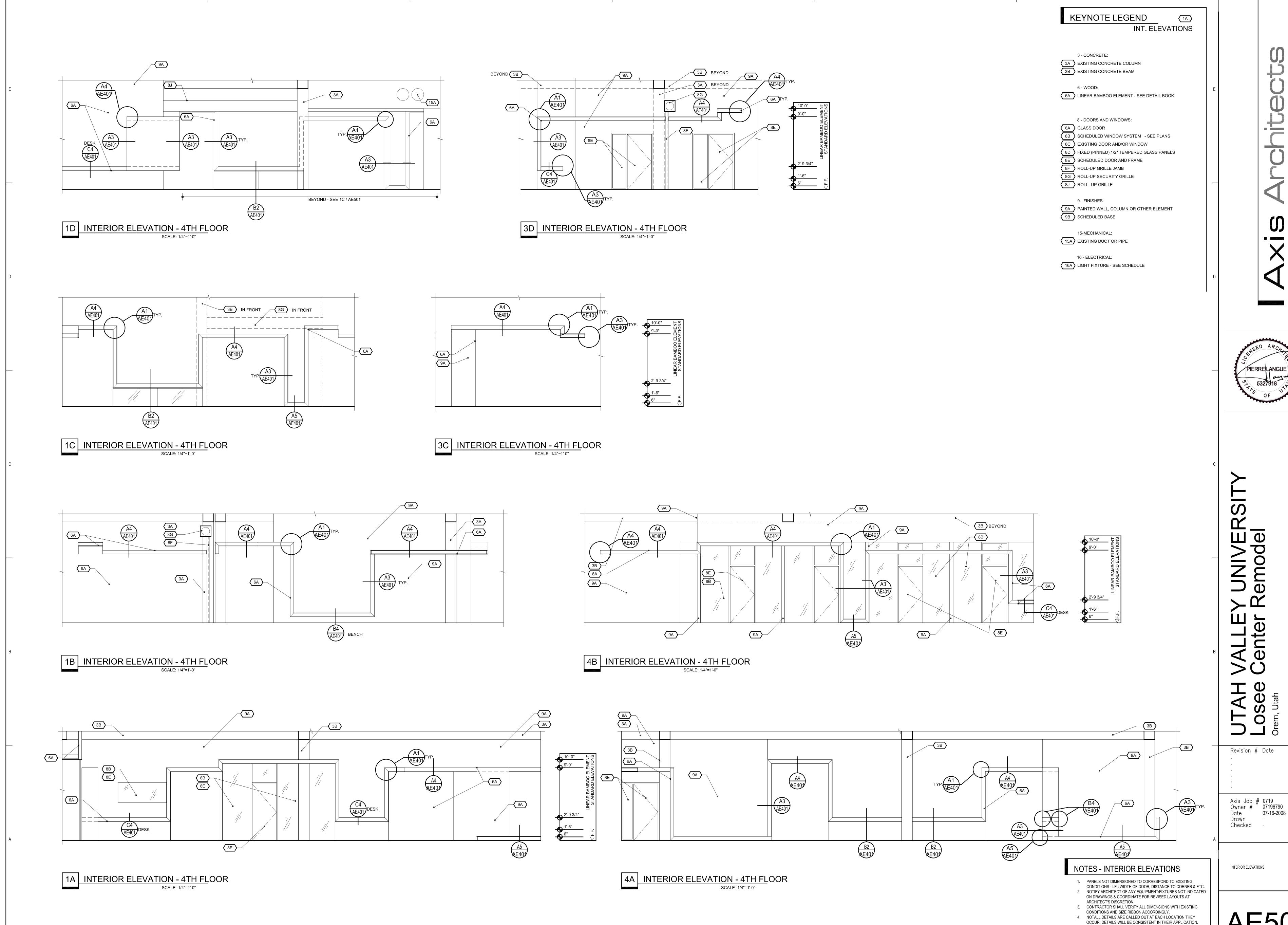
4E30²

6C EXTERIOR SHEATHING



P:\2007\0719-DFCM-UVSC-Losee-Centen\CD\AE401.dwg, 7/17/2008 2:04:30 AM, Boyd ,, Axis Architects, PDF995, 1:1.008

AE40



07-16-2008

AE502

4. NOTALL DETAILS ARE CALLED OUT AT EACH LOCATION THEY OCCUR; DETAILS WILL BE CONSISTENT IN THEIR APPLICATION.

KEYNOTE LEGEND

3 - CONCRETE:

6 - WOOD:

(8A) GLASS DOOR

3A EXISTING CONCRETE COLUMN
3B EXISTING CONCRETE BEAM

8 - DOORS AND WINDOWS:

8C EXISTING DOOR AND/OR WINDOW

8E SCHEDULED DOOR AND FRAME

8F ROLL-UP GRILLE JAMB 8G ROLL-UP SECURITY GRILLE

8J ROLL- UP GRILLE

9 - FINISHES

9B SCHEDULED BASE

15-MECHANICAL:

15A EXISTING DUCT OR PIPE

16 - ELECTRICAL:

16A LIGHT FIXTURE - SEE SCHEDULE

6A LINEAR BAMBOO ELEMENT - SEE DETAIL BOOK

8B SCHEDULED WINDOW SYSTEM - SEE PLANS

8D FIXED (PINNED) 1/2" TEMPERED GLASS PANELS

9A PAINTED WALL, COLUMN OR OTHER ELEMENT

INT. ELEVATIONS

Axis Job # 0719 Owner # 07196790 Date 07-16-2008 Drawn -Checked -

INTERIOR ELEVATIONS

NOTES - INTERIOR ELEVATIONS 1. PANELS NOT DIMENSIONED TO CORRESPOND TO EXISTING CONDITIONS - I.E.: WIDTH OF DOOR, DISTANCE TO CORNER & ETC. 2. NOTIFY ARCHITECT OF ANY EQUIPMENT/FIXTURES NOT INDICATED ON DRAWINGS & COORDINATE FOR REVISED LAYOUTS AT

ARCHITECT'S DISCRETION.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH EXISTING CONDITIONS AND SIZE RIBBON ACCORDINGLY. 4. NOTALL DETAILS ARE CALLED OUT AT EACH LOCATION THEY OCCUR; DETAILS WILL BE CONSISTENT IN THEIR APPLICATION.

A1 INTERIOR ELEVATION - CONF. 309

SCALE: 1/4"=1'-0"

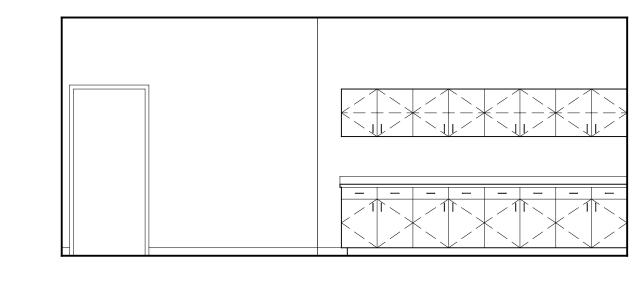
C1 INTERIOR ELEVATION - WORK RM. 410B

SCALE: 1/4"=1'-0"

B1 INTERIOR ELEVATION - OFFICE 405Q

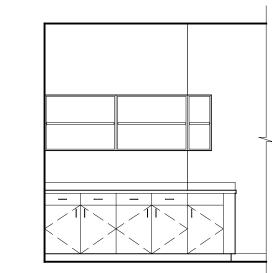
B2 INTERIOR ELEVATION - WORK RM. 406

SCALE: 1/4"=1'-0"



B3 INTERIOR ELEVATION - HOSTING RM. 408C

SCALE: 1/4"=1'-0"



A2 INTERIOR ELEVATION - COPY. 312A

SCALE: 1/4"=1'-0"

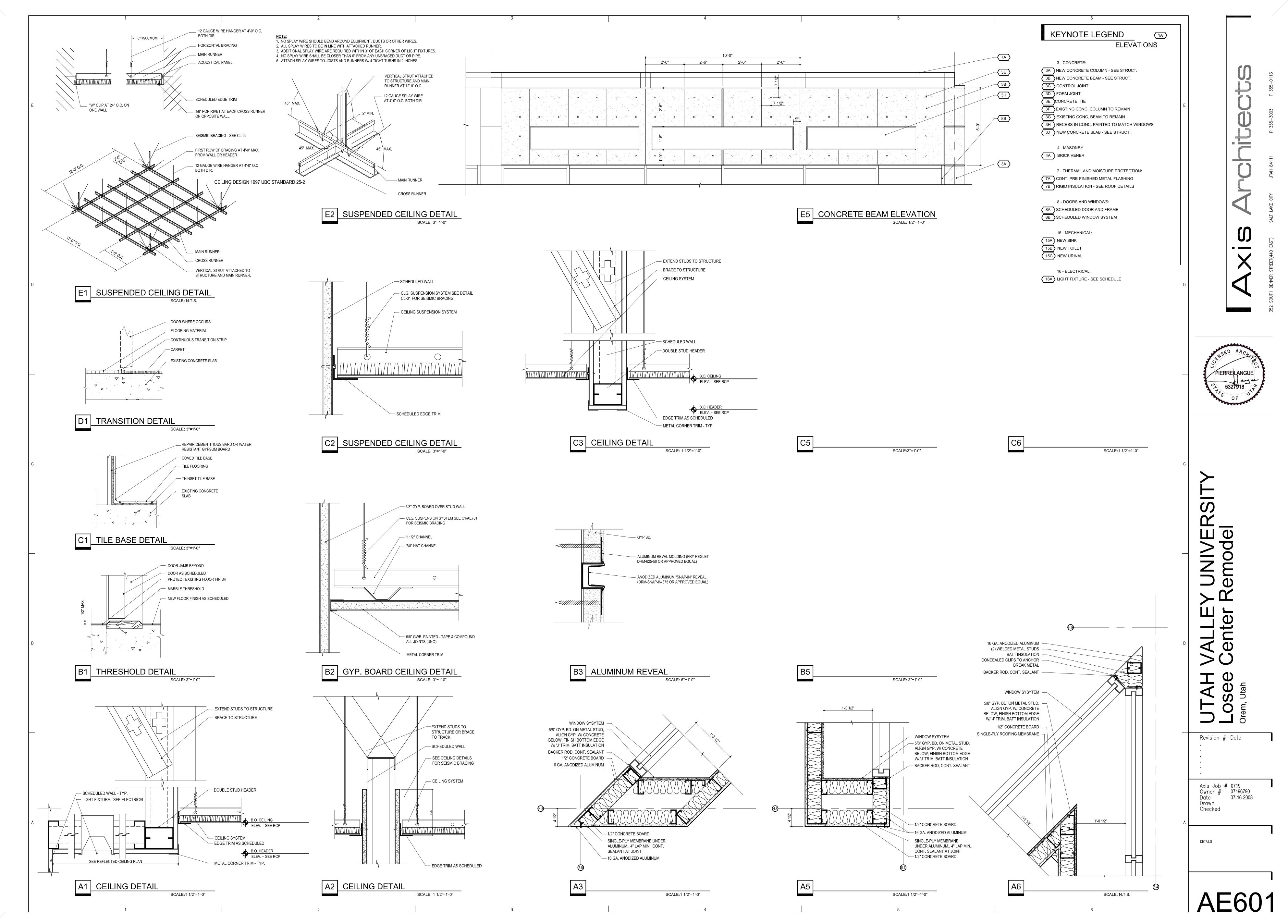
A3 INTERIOR ELEVATION - STORAGE 403F

SCALE: 1/4"=1'-0"

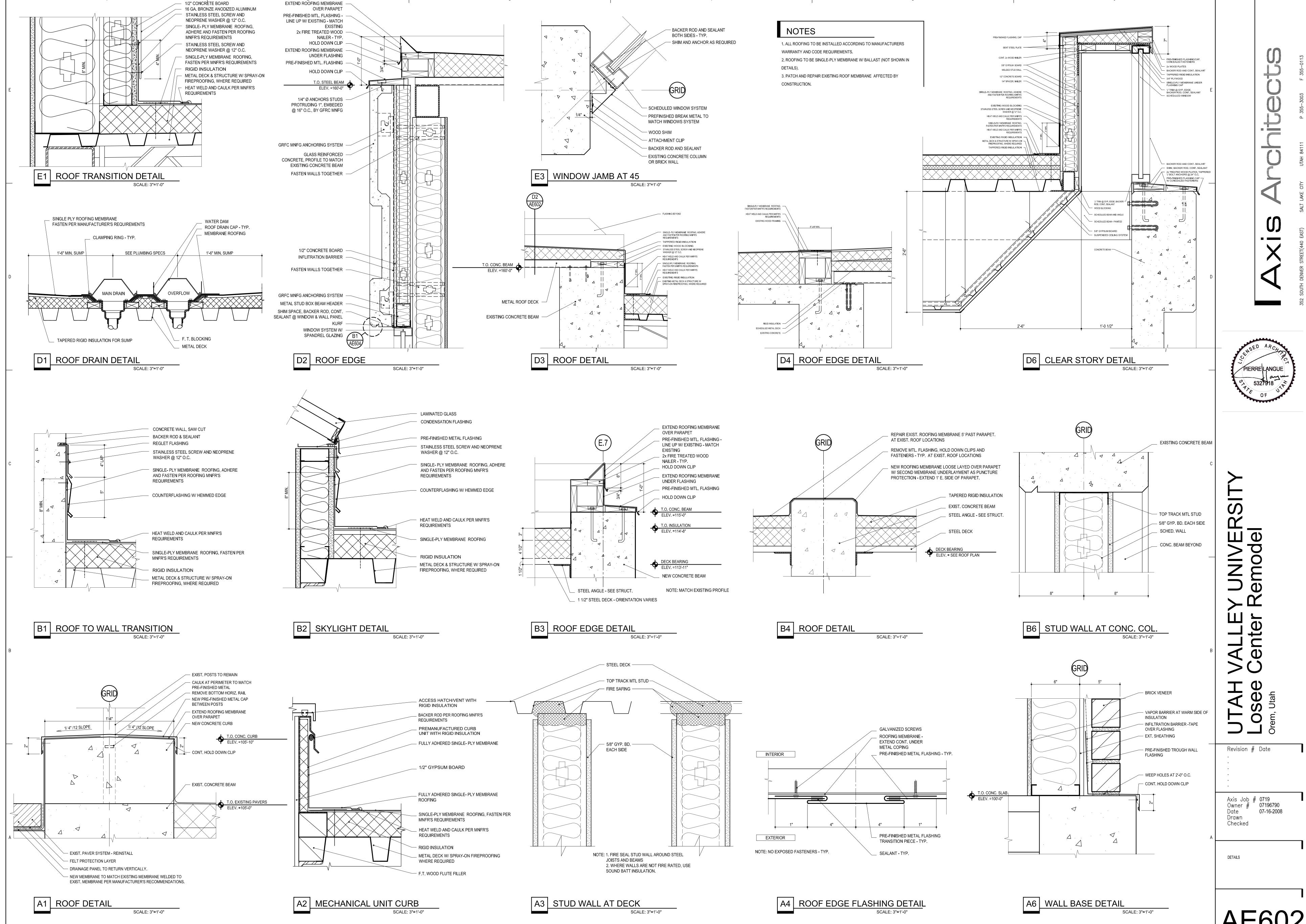
A4 INTERIOR ELEVATION - MAIL RM. 404E

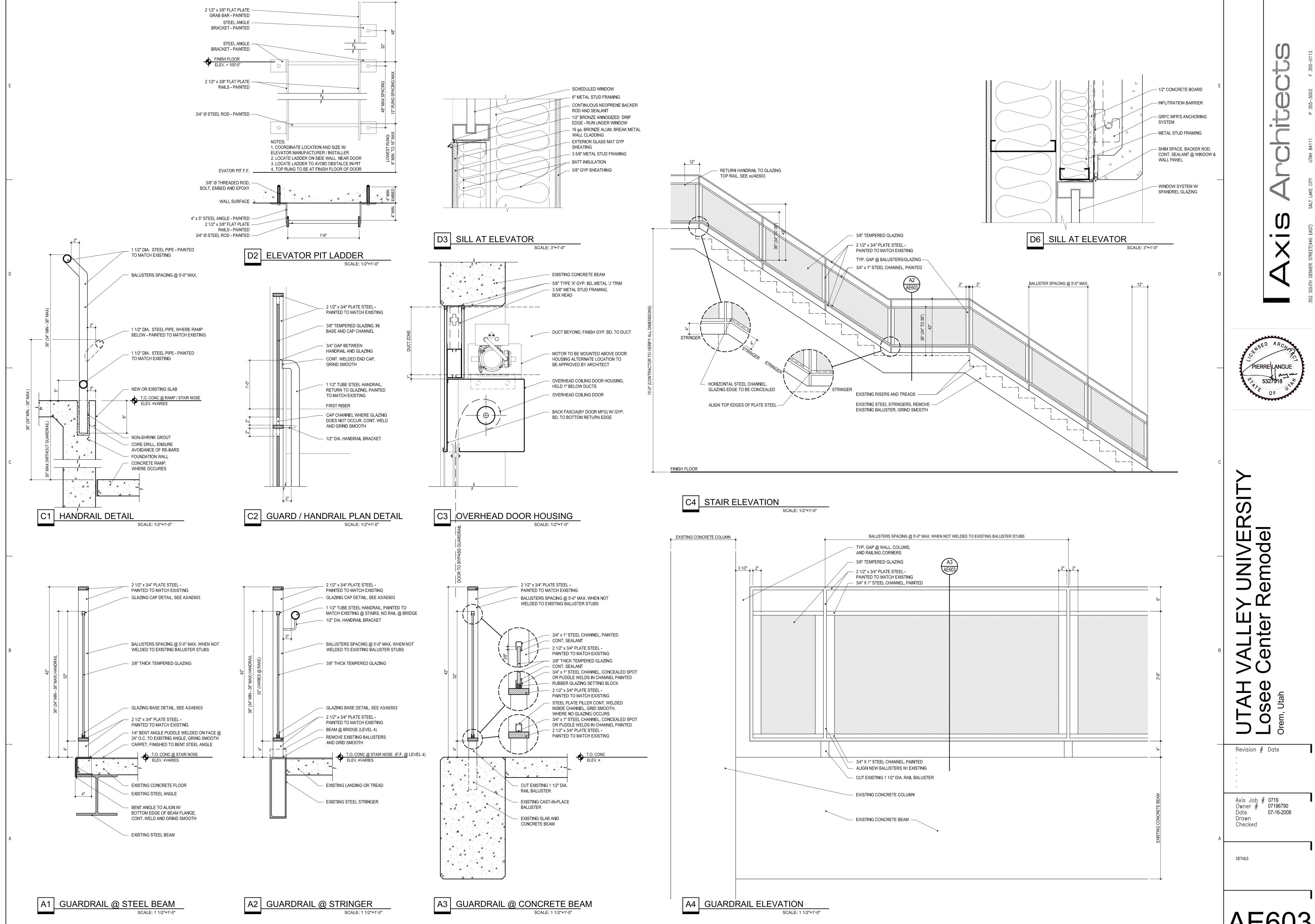
SCALE: 1/4"=1'-0"

B5 INTERIOR ELEVATION - WORK/STOR. 408G

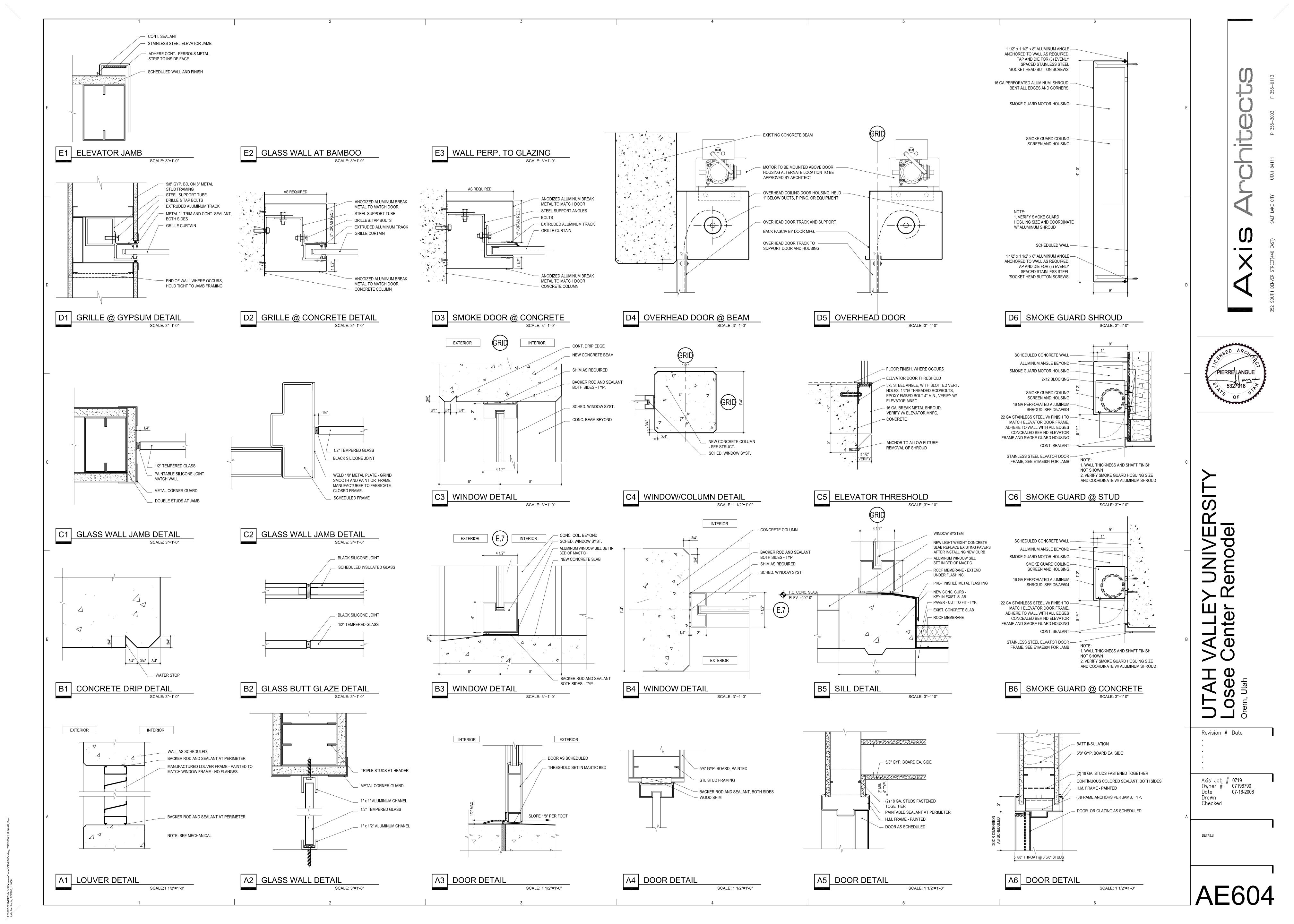


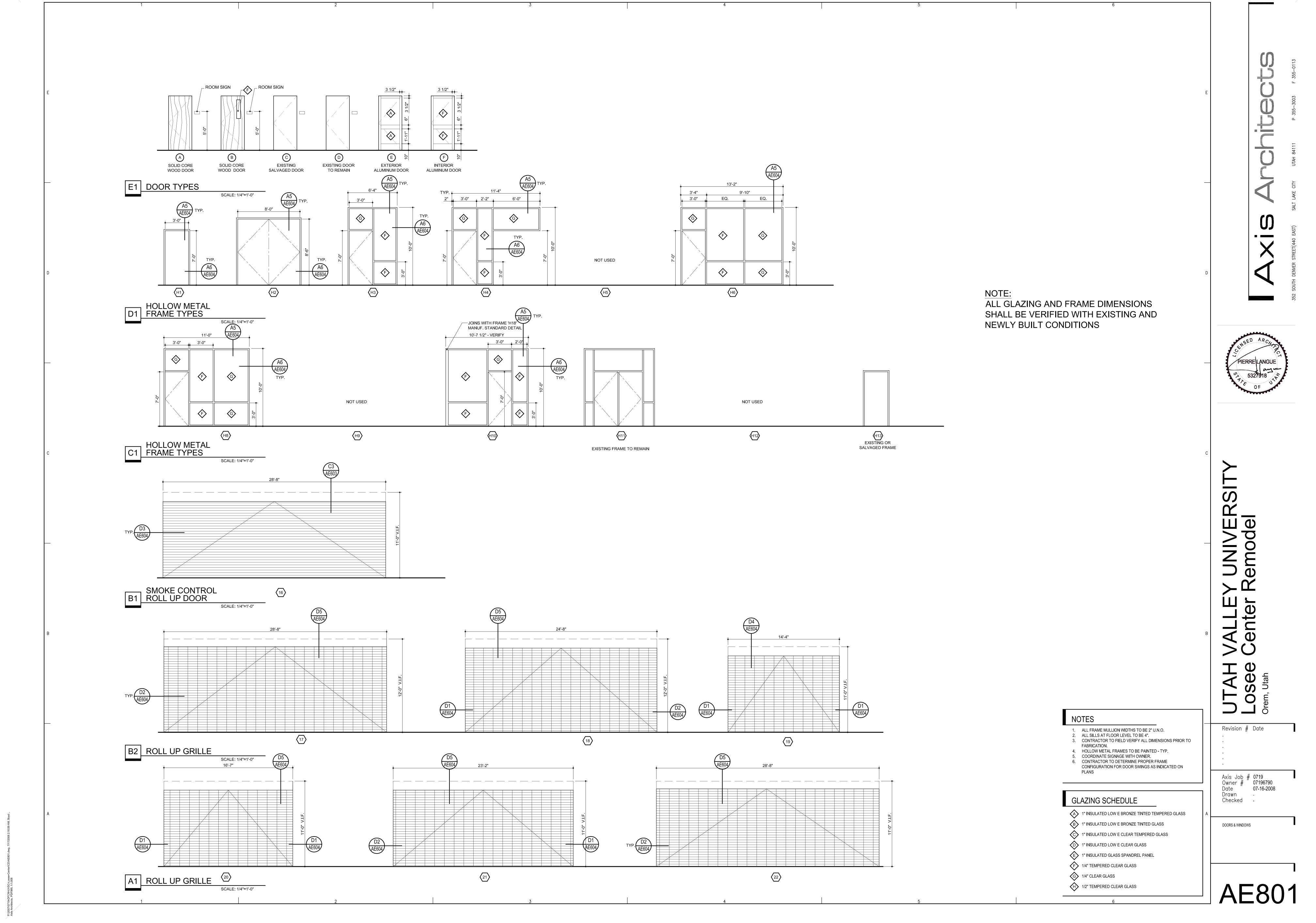
P:\2007\0719-DFCM-UVSC-Losee-Center\CD\AE601.dwg, 7/17/2008 2:15:44 AM, Boyd Axis Architects, PDF995, 1:1.008

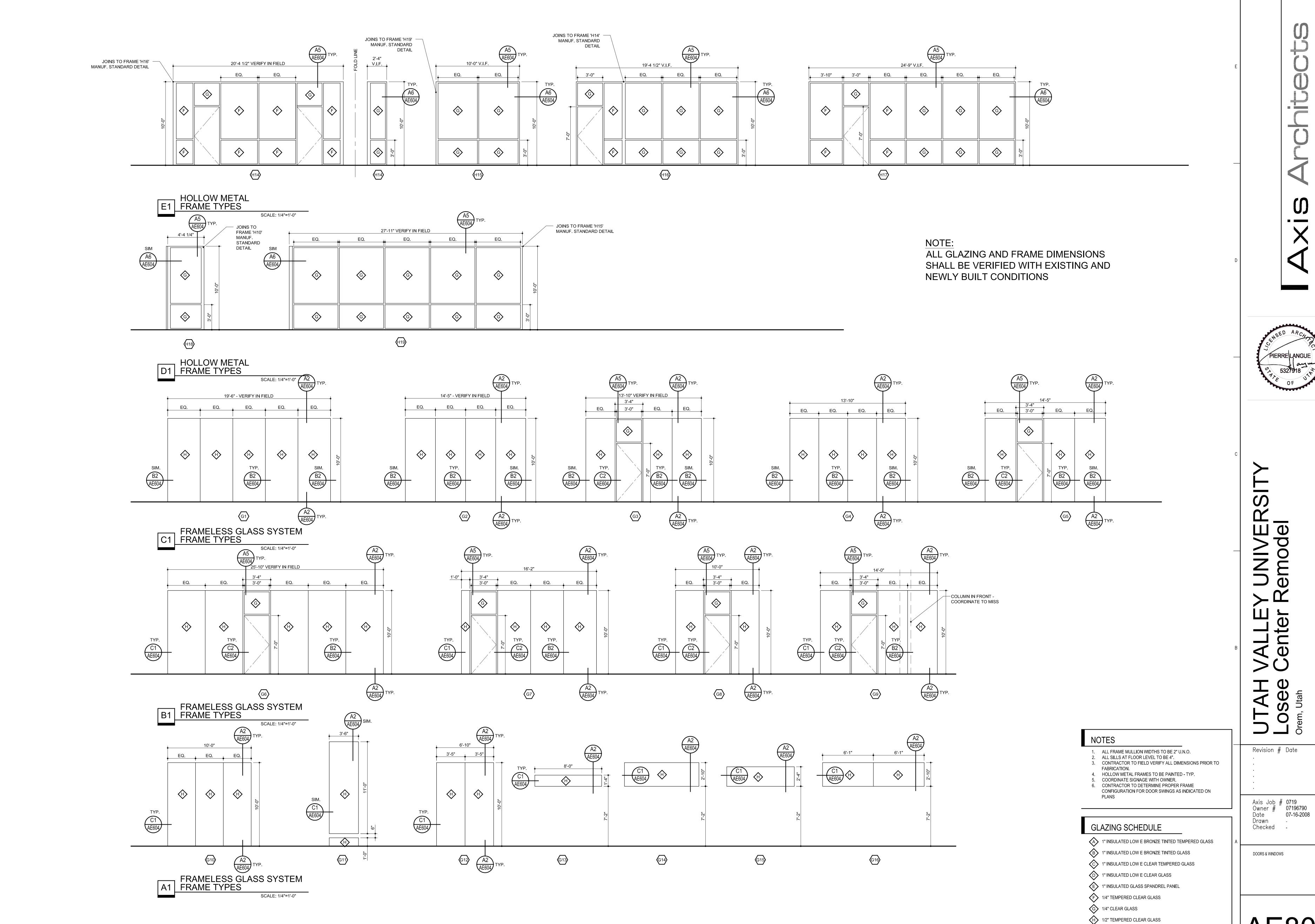


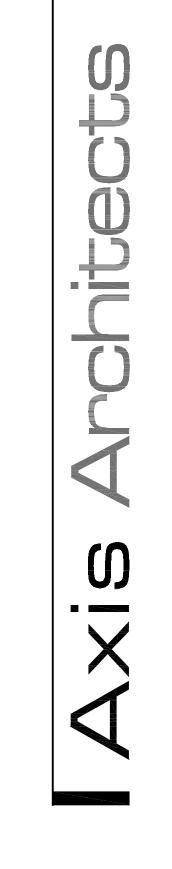


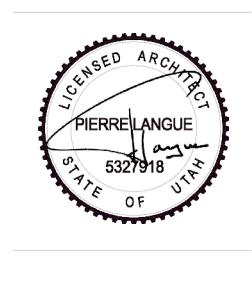
AE603











Revision # Date

Axis Job # 0719 Owner # 07196790 Date 07-16-2008 Drawn -Checked -

DOORS & WINDOWS

 ALL FRAME MULLION WIDTHS TO BE 2" U.N.O.
 ALL SILLS AT FLOOR LEVEL TO BE 4".
 CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION. 4. HOLLOW METAL FRAMES TO BE PAINTED - TYP.

CONFIGURATION FOR DOOR SWINGS AS INDICATED ON PLANS

GLAZING SCHEDULE

1" INSULATED LOW E BRONZE TINTED TEMPERED GLASS

B 1" INSULATED LOW E BRONZE TINTED GLASS 1" INSULATED LOW E CLEAR TEMPERED GLASS

1" INSULATED LOW E CLEAR GLASS E 1" INSULATED GLASS SPANDREL PANEL

5. COORDINATE SIGNAGE WITH OWNER. 6. CONTRACTOR TO DETERMINE PROPER FRAME

F 1/4" TEMPERED CLEAR GLASS

—ALUMINUM BREAK METAL TO MATCH FRAME

G 1/4" CLEAR GLASS H 1/2" TEMPERED CLEAR GLASS

A3 AE601 C1 EXTERIOR ALUMINUM FRAME TYPES

R.O. 40'-10 1/2" VERIFY IN FIELD

 \Diamond

3'-0"

A3 AE604

R.O. 28'-8" VERIFY IN FIELD

R.O. 28'-0" VERIFY IN FIELD

 \Diamond

B3 AE604

—ALUMINUM BREAK METAL TO MATCH FRAME

R.O. 28'-8" VERIFY IN FIELD

R.O. 39'-7" VERIFY IN FIELD

 \bigotimes

4'-10"

 \bigcirc B

 \bigotimes

 \Diamond

ADJACENT TO WINDOW A2-

R.O. 40'-8" VERIFY IN FIELD

3'-0"

 \Diamond

 \bigotimes

 \bigotimes

 \bigotimes

ALUMINUM BREAK METAL— TO MATCH FRAME

 \bigotimes

Revision # Date

Axis Job # **28035** DFCM Owner # 07-11-2008 Date Drawn

STRUCTURAL GENERAL NOTES

Checked

I. Basis of Design Bl. Governing Building Code: 2006 International Building Code

B2. Gravity Loading20 psf dead load Snow Loads Plus Snowdrift Pq= 43 psf Pf= 33 psf Ce= 1.0 ls= I.l Ct= 1.0

B3. Earthquake A. Seismic Design Category.. IE = 1.25 B. SDS = 0.799, SDI = 0.49, Ss = 1.155, SI = 0.485 Site Class = D

D. Lateral Force Resisting System = Concrete Moment Frames with shear walls E. Base shear = 0.125W R= 8F. Analysis procedure = Equivalent Lateral-Force Procedure

B4. Wind velocity.......90 miles per hour (3 second qust speed) exposure B Net uplift force at roof equals 17 psf.

B5. Foundation A. Soil Bearing Pressure......1500 psf. See soil report for subgrade preparation.

B. Frost Depth..... inches. III. Concrete and Reinforcing

Cladding and Components.....

Cl. All work and materials shall comply with all areas of AC1318 and ACI 347 Publications and applicable ASTM Publications.

C2. Compressive strength of concrete at 28 days shall be as follows: (only 1-grade of concrete shall be poured on the job at one time). Use type II cement in contact with ground.

% Maximum Special Compressive Stren'ath(psi) Slump Air AggregateInspection (At 28 Days) (+/- 1/2") Entrainment Size Required 3000 3% | 1/2" No Foundátions 1 1/2" Int.Slab on Grade 4000 Ext.Slab on Grade 4500 3 5 1/2% to 7 1/2%1 1/2" water/cement ratio = .45 max. Suspended Slab 4000 Concrete Topping 3000 3.5 N/R Beam & Columns 4000

C3. Hardrock aggregates shall conform to ASTM C-33. Their Maximum size shall be 3/4" except I" shall be used for footings and slabs on grade.

C4. Admixtures A. Concrete mix shall include flyash as per ASTM C618 class "F" except that maximum loss on ignition shall be limited to 1% to 'yield specified quantities. Flyash replacement of cement shall be limited to 20% by weight."

C5. The contractor shall submit mix design and 3, 7, and 28 days strength tests for review by the structural engineer before any concrete is poured at the job site.

C6. All concrete that is placed by pumping shall be medium rangeplasticized with water reduciną admixture which shall comply with specifications for chemical admixtures for concrete, ASTM designation C-494 non-chloride and shall be used in strict accordance with manufacturer's recommendations. Product specification publication shall be submitted to structural engineer for review.

C7. Unless otherwise noted all reinforcement bars shall be securely anchored to the forms and spaced from them as follows: Minimum Coverage

A. Cast against & exposed to earth......3 inches B. Concrete exposed to earth or weather: #6 though #18 bars.....2 inches #5 bar and smaller...... 1/2 inches

C. Not exposed to weather or in contact with ground: slabs, walls, joists:.....3/4 inches C8. Reinforcing Steel

A. All reinforcing steel shall be bent, detailed and chaired as per the "ACI Manual of Standard Practice for Detailing Reinforcing Concrete Structures. B. All reinforcing steel to be welded shall comply with ASTM

C. All reinforcing steel shall be of new stock deformed bars conforming to ASTM A-615 grade 60 unless otherwise noted Placement of bars in accordance with ACI 315 and ACI 318. Use bar supports per ACI 315 chapter 7 for all rebar and welded wire fabric. As per ACI 318, Section 7.5.1: "All reinforcement shall be accurately placed and adequately supported before concrete is placed and shall be secured against displacement within tolerances permitted in 1.5.2." Wet stabbing reinforcing is not allowed.

D. Unless otherwise indicated, all anchors welded to steel plates or angles that are embedded in masonry or concrete shall be deformed bar anchors conforming to A36 Steel or

ASTM ATO6. E. Minimum standard rebar lap lengths: #3=19" #4=25" #5=31" #6=37" #7=54" #8=62" #9=70" #10=78" #11=85". Epoxy coated bar laps, multiply above values by 1.2. For epoxy coated rebars or wires with cover less than 3db or clear spacing less than 6db, the laps shall multiply the above values by 1.5. Lightweight concrete bar laps, multiply above values by I.3. (ie. #6=37"x1.3=48"). If more than 12" concrete is below rebar (beam top

reinforcing), multiply above values by 1.3. (ie. #5=31"x1.3=47"). See shear wall schedule for seismic lap lengths. All vertical reinforcing bars (unless noted otherwise) shall be doweled to footing with 90 degree standard hook. F. Reinforcing for concrete walls as follows: (unless

otherwise noted on drawings) Horizontal Reinf Vertical Reinf Thickness #4 at 16" o.c. #4 at 18" o.c. #4 at 12" o.c. #4 at 18" o.c. #4 at 15" o.c. #4 at 18" o.c. each face each face #4 at 12" o.c. #4 at 18" o.c. each face each face #4 at 18" o.c. each face each face #4 at 12" o.c. #4 at 18" o.c.

each face

#4 at 18" o.c. #4 at 10" o.c. each face each face 6. All dowels shall have at least 38 bar diameter embedment. H. Break out dowels may be used for convenience of contractor, however dowels shall be Grade 40 and spacing

each face

of dowels shall be decreased by 1/3. 1. Provide corner bars at all intersecting corners. Use same size bar and spacing as horizontal wall reinforcing. J. Add 2-#5 bars around all openinas (unless otherwise noted) and extend 24" beyond corner of openings. Add also 2-#5 x 4'-0 diagonally at corners. For reinforcing over

opening see opéning details on drawings. K. When called for on the drawings or when directed by enaineer bars that are to be epoxy doweled are to be put in holes larger than the bar diameter (1/4" larger for rebar and 178" larger for threaded bars). The holes shall be ten bar diameters deep for 4000 psi concrete or above and 15 bar diameters for concrete below 4000 psi and masonry. Fill holes with "Hilti" Hi-Mod epoxy gel (or equal as approved by engineer). All epoxy dowels and epoxy anchors are to be either threaded or deformed bars as per drawings. Apply epoxy as per manufacturer's recommendations. Mixing shall be done using a power mixer. For cold weather application gel shall be mixed at 70 degrees and kept at 40 degrées for 72 hours after application. Impact type drilling tools shall not be used for drilling holes of tightening

anchors and shear bolt nuts into or through brick. SPECIAL INSPECTION IS REQUIRED. L. The contractor shall include an "in-place" price in his bid for 2000 pounds of reinforcing bars to be used as directed by the structural engineer. This reinforcing steel need not be stockpiled at the job site. The contractor shall submit with his bid a unit price credit

for the unused portion of bars. M. Top rebar in slabs and beams includina top 6" of ties and column bars exposed to weather are to be epoxy coated after fabrication as per ASTM A 775-81 "Standard Specifications for Epoxy-coated Rebar." Splice length of epoxy-coated top bars shall be 1.7 times the length in Note E. Splice length for all other epoxy coated bars

shall 1.5 times Noté E. N. Beam Rebars shall be spliced as follows, unless noted otherwise: a. Top bars at midspan.

b. Bottom bars at support.

C9. Concrete tests shall be made by testing laboratory approved by the architect, with copies of all reports being mailed to the architect and the contractor. In general, one test shall be made for each 50 cubic yards of concrete, or each days' pour if less than 50 yards, or as directed by Architect. Each test shall consist of 5 cylinders of which one shall be tested at 7 days, 2 tested at 28 days, and two retained in reserve for later tests, if required. Specimens shall be made and tested in accordance with ASTM C-172, C-31 and C-39 standards. Slump and Air entrainment test shall also be made with each set of cylinders taken. Contractor shall provide the cylinders. The testing laboratory shall transport all cylinders. The owner shall pay for all tests.

CIO. Before concrete is poured, check with all trades to insure proper placement of all openings, sleeves, curbs, conduits, bolts, inserts, etc. relating to work.

CII. Drypack concrete shall be one part Portland cement and one part sand with sufficient water to allow a small amount of paste to come to the surface. Use for grouting joists and beam pockets unless otherwise noted.

C12. Under steel column base plates, concrete grout shall be non-shrink with sufficient water to allow pouring. Ultimate compressive strength (F'C) at 28 days shall = 4,000 psi. Grout shall be non-metallic, meeting CRD-C621 and in accordance with the manufacturer's published specification for mixing and placing.

Cl3. Formwork not supporting weight of concrete, such as sides of beams, walls, columns, and similar parts of the work, may be removed after cumulatively curing at not less than 50 degrees for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form removal operations, and provided curing and protection operations are maintained. Formwork supporting weight of concrete, such as beam soffits, joints, slabs and other structural elements, may not be removed in less than 14 days or until concrete has attained 75% of its design minimum compressive strength at 28 days. Support formwork from facing materials with structural members spaced sufficiently close to prevent deflection. Fit forms placed in successive units for continuous surfaces to be accurately aligned free from irregularities and within allowable tolerances. Provide I/16" camber per every 2.5 feet in concrete formwork of exposed to view concrete unless otherwise indicated by Architect/Engineer.

CI4. All exposed to view concrete shall be stoned smooth while green, or as directed by Architect. No grout plaster shall be Exposed to view concrete shall have 3/4" deep "V" groove placed vertically at 8'-0" o.c. or as directed by Architect.

CI5. Protect freshly placed concrete from premature drying and excessive cold or hot temperature as per ACI 318 and maintain without drying at a relatively constant temperature for a period of time necessary for hydration of cement and proper

C16. Cold weather curing and protection requirements for concrete shall conform to the requirements of ACI 306 when depositing concrete at freezing temperature or below, the concrete mix shall have a temperature of at least 50 degrees but not more than 80 degrees. The concrete shall be maintained at a temperaturé of not less than 50 degrees and in a moist condition for not less than 7 days after placing or as directed by the structural engineer. The use of chemicals or additives to prevent freezing will not be permitted. Contractor shall prevent frost from penetrating under footings or interior slabs on grade or postpone concrete pour. Refer also to specifications and to any directive by 'structural engineer for additional cold weather requirements

CIT. Architect/Engineer shall be notified 48 hours prior to pouring any concrete in order to observe reinforcing

C18. All concrete shall be properly vibrated in place using internal vibrating rods.

CI9. Non-shored suspended concrete slabs shall be screeded off of non-deflecting elements or make adjustments for slab joistbeam deflections. Submit deflection design for review.

C20. Unless otherwise noted all concrete slabs apply a liquid type membrane forming curing compound complying with ASTM C 309, type I, class A Moisture loss shall be not more than 0.055 qr./sq. cm. applied at 200 sq.ft./qal. When temperature is 75 degrées or more during placément do not use membrane but moist cure slab for 7 days continuous minimum or see ACI Committee 305 Report "Hot Weather Concreting". Submit method of curing for approval.

C21. All suspended concrete slabs shall be reinforced with 6x6 - H2.9 x H2.9 welded wire mesh with #4 slab dowels at 16 inches on center unless noted otherwise on drawings.

V. Structural Steel

SI. All structural steel work shall comply with the latest edition of the AISC "Standard Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings' and "Code of Standard Practice". ASTM A-992 FY=50 ksi minimum specified for structural shapes, A36 steel for miscellaneous steel, and ASTM A-500 grade B for structural tubes, typical U.N.O. Cambering shall meet the standard mill practice shown on AISC "Manual of Steel Construction".

52. Shop paint and remove all rust, oils, mill scale. Apply one coat zinc chromate 2 dry mills thick. Provide touch up field coat at all abraded and welded areas, two dry mills thick. All steel exposed to moisture conditions shall be galvanized. (Follow SSPC - Paint 20; ASTM A 780)

S3. Unless noted otherwise, all structural steel to steel bolted connections shall use 3/4" diameter high strength bolts conforming to ASTM A-325 (N) and shall have carbonized washers under the turning unit. All other bolts shall conform to ASTM A-307. A-325 bolts are to tightened by either turn of the nut method or load indicator washers. All A-325 bolt tightening shall be supervised by an independent testing agency who shall certify in writing that all bolts are properly tightened.

S4. Unless noted otherwise on plans, all steel floor beams shall have L/480 positive camber for 25 feet or greater spans and roof beams over 30 feet or greater TYP. U.N.O.

A. All welding to be made by certified welders using E-70 series electrodes. (For all welding of ASTM A-572 steel ETOX8 electrodes shall be used and welding shall be as per AMS DI.I "Structural Melding Code".) B. 'All welders to be currently certified for all type of

welds on this project under latest AMS DI.1, Structural Welding Code. Welders to have passed the Qualification Requirements within preceding 6 month period. C. Welds made against concreté are to be done under the supervision of an approved testing agency and that fillet welds should be made in 1/8" passes 2" long at 4" o.c

D. All steel to steel connections not shown boilted which is continuous, shall be welded to develop full strength capacity of connecting members. E. Minimum size of fillet weld (unless noted otherwise on drawings):

Material thickness of Minimum size of thicker part joined of fillet weld to 1/4" inclusive 1/8" all around over 1/4" to 1/2" 3/16" all around 1/4" all around over 1/2" to 3/4" over 3/4" to 1 1/2" 5/16" all around

F. Unless otherwise noted, all structural steel to steel connections shall be made in such a manner to develop full shear capacity of connecting members as per AISC specification's. 6. Field paint all abraded and welded surfaces for joists and metal deck. Use SSPC - Paint 20 (Galvanic).

H. Unless otherwise indicated, all anchors welded to steel plates or angles that are embedded in masonry or concrete shall be deformed bar anchors conforming to A36 Steel or ASTM ATO6 I. All deck bearing angles or plates shall have full

penetration welds at splice's and corners typical unless noted otherwise. J. All full penetration welds shall be tested by x-ray or ultrasonic procedures by an independent testing agency approved by the architect. Where testing procedures are not physically possible, visual inspection before and

during welding shall be done by an independent testing K. 10% of all shop and field welds shall be done under the direct supervision of an independent testing agency approved by the architect and tested by magnetic particle

L. Copies of all tests results are to be sent to structural engineer. Melds found to be defective shall be corrected at no extra cost to the owner. M. All weld testing shall be paid for by the owner. S6. Steel Deck

A. All metal deck shall meet requirements of Steel Deck Institute (SDI) for wide rib deck. See drawings for type of deck. Manufacture shall be a member of SDI. B. Deck manufacturer shall have ICBO certification showing lateral shear capacities of deck equaling 1400 plf YPICAL and 2100 plf for 18 gage deck, with an F Flexibility Factor) less than 10. Provide 18 gage sheet metal reinforcing at all valleys,

hips, ridges, deck changing directions, and openings through metal deck. For openings 15" and larger frame opening with angle $3 \times 3 \times 1/4$ unless otherwise noted. End laps to occur at supports and shall have minimum lap of 2". The deck shall be attached to all supports and the side lap of adjacent units. D. All deck splices shall occur over supporting members and shall have a minimum of 4" of flat bearing súrface

E. Deck Welding (unless otherwise noted): a. Supports parallel to deck 3/4" diameter puddle

welds at I2" o.c. Supports perpendicular to deck 3/4" diameter at each valley.

c. Top seam welds | 1/2" at 12" o.c. Deck shall be crimped prior to all side or top seam welding. For composite floor deck, side lap use 1/4" diaméter button punch at 24" o.c.. d. Welder shall be certified as a light gage welder in accordance with AMS.

e. Use E60 electrodes a, b, and c are minimum deck welding, deck supplier is to indicate deck welds on shop drawings to develop stated shear capacities. Unless noted otherwise on drawings all deck shall bear on and be welded to continuous anglé $3 \times 3 \times 1/4 \times cont.$ at all deck boundaries fastened to concrete or masonry wall with weld plates as per typical details or 3/4" diameter \times 8" \times 3" J-bolts at 16" o.c. Provide angle 3 1/2 \times joist depth \times 3/16 under all changes in deck direction.

G. All continuous deck bearing angles shall have full penetration welds at splices and corners. H. 'Architect/Engineer shall be notified 48 hours prior to application of roofing material in order to observe deck I. Roof deck and joists and girders shall be designed for 17 psf uplift force minimum, U.N.O.

ST. Steel Studs A. Structural steel studs shall be as specified in this note and shown on drawings with minimum effective properties.

Stud Size Gage Gross Area (ln.2) IXX (in.4) 6"x | 5/8 | 18 .43 2.22 6"x | 5/8 2.22 6"x | 5/8 2.76 4"x | 5/8 3 5/8 x 1 5/8 16

B. All studs shall be spaced at 16" o.c. unless noted otherwise and to be standard painted unless otherwise

Fy for 16 ga. and heavier material..50 Ksi Fy for 18 ga. and lighter material..33 Ksi Unless otherwise noted all bridging to be 1 1/2" minimum x 1/8" minimum x continuous cold roTled channels positioned through stud punch-outs and weld attached or both sides to stúd punch-out. Bridging shall be spaced at 4'-6" o.c. to match punch-outs. Where punch-outs do not line up use weld attached bridge clip angles.

powder driven fasteners. Tracks and bridging to have Fy = 33,000 psi. . All splices of structural studs to be full strength. Use 2'-0" minimum section lapped I'-0" above and below splice fully welded. Alternate 'all splices 24" minimum. Spot paint all welds after cleaning. F. Load bearing stud walls must be fabricated with the stud

D. All track to be stud size by 1 1/2" flange by 16 gage

concrete slab at 16" o.c. using .177" diameter x 1 1/2"

standard painted unless noted otherwise. Attach track to

ends seated against the track web. Full web and flange bearing must bé provided. 6. All structural studs shall be welded to top and bottom tracks with $1/8" \times 11/2"$ fillet at each stud flange and 1/8" x 3" at stud web.

58. Steel columns and beams that are located inside concrete or masonry walls or that are in contact with the walls shall have déformed bar anchors (KSM or Nelson) welded to the steel members at the shop. The deformed bar anchors (abbreviated DBA) shall match the size and location of the horizontal or vertical wall rebar that is interrupted by the steel members and shall be of such length to lap 38 bar diameters with the concrete wall reinforcing and 48 bar diameter with the masonry wall reinforcing. Steel columns which are located inside the wood wall shall have a 3x stud with $5/8" \times 2 1/2"$ welded stud at 48" o.c. TYP. U.N.O..

59. Headed stud type shear connectors shall conform to ASTM A-108 grade 1015 or 1020 cold finished carbon steel with dimensions complying with AISC specifications and as shown on drawings.

SIO. Unless noted otherwise on plans, all steel stairs shall have CI2 x 20.7 stringers with concrete filled I2 gage welded pans

VII. General Conditions

Gl. If discrepancies exist between specifications, general notes and drawings, call the Engineer (801-575-8223) to resolve the conflict or use the more expensive option.

62. All dimensions on structural drawings shall be checked and verified against architectural drawings. All dimensions relating to existing site, buildings, installations or construction shall be field verified, all discrepancies shall be submitted to the architect. Do not proceed with fabrication and erection of materials affected until discrepancies are resolved.

63. All omissions or discrepancies in the working drawings and or specifications shall be brought to the attention of the Architect and/or Structural Engineer before proceeding with any work involved.

A. Until all permanent members, including walls, slabs, floors and roof are in place and all connections are completed, stability of structure and all parts thereof shall be contractor's responsibility. During construction contractor shall keep construction loads within the design load limits shown on drawings. After construction is completed building owner shall keep loads on roof and floor within design limits shown on drawings. B. Do not backfill walls until floor at top of wall is in place or adequate temporary bracing is provided. C. Contractor shall provide shoring design calculations and drawings stamped by a Utah Reģisterēd Professional

65. All Construction shall be in accordance with the IBC 2006 and supplements unless a higher standard is called for.

66. Unless a more stringent requirement is specified, design all members with minimum Live Load deflection of L/360. 67. Contractor shall be responsible for safety and protection in

and around job site and or adjacent propérties. 68. Observation visits to the site by Bsumek Mu and Associates Field Representative shall neither be construed as inspection

nor approval of construction. 69. Contractor shall provide 5 sets of shop drawings for review by structural engineer for: all reinforcing bars, structural steel, alu-lam beams, wood joist, clock tower, and all prefab. structural items (including structural calculations) and shall also be approved by the governing authority prior to installation. See Section 106.3.4.2.

610. All openings through floors and walls shall be verified with architectural, mechanical and electrical drawings. Do not cut openinas in concrete or masonry without approval of structural engineer and architect.

GII. Contractor/Window/Door - Supplier shall provide 1/2" minimum vertical movement capability in frame system. Window/Door-Supplier shall design for wind load specified under "Basis for Design" and shall submit professional engineer stamped design calculations showing compliance with Wind Load Capacity and vertical movement capacity.

612. Seismic bracing of electrical, mechanical equipment, and ceiling system shall be designed by their respective supplier and stamped by a Utah Professional Engineer and submitted for VIII. Special Inspections and Structural **Testing for Seismic Resistance** Special inspections shall be done by Special Inspectors that are

specifications.

qualified and approved for each area of work stated below or as required by the Building Official. All special inspections shall be paid for by the OWNER. The special inspector shall observe the work assigned for conformance with the approved design drawings and specifications. The special inspector shall submit reports to the $\tilde{\ }$ owner, the Building Official, the Contractor, Architect, and Bsumek Mu and Associatés. The special inspectors shall conform to and fulfill all other responsibilities as outlined in SECTION 1704, 1707, 1709 of the IBC 2006. The special inspector shall submit written reports of observations stating time, date, location of

design review and should be submitted to the governing

GI3. The appearance of all exposed structural elements shall be

elements that are exposed to view shall be repaired before

erection and shall be approved by the architect. All sweeps in beams joists, and airders areater than 1/2" shall be

corrected. Repairs shall be made at no cost to the owner.

All blemishes, dents, or shipping damage in structural

For tolerances in wide flange shapes, follow AISC

authórity for approval prior to installation.

approved by architect or owner.

A. See note C2 for concrete above 2500 psi not requiring special inspections. Some higher strength concrete is specified for B. Special inspections are required for the following work:

.' Concrete and reinforcing placement. Except for the following conditions: a. For foundations satisfying requirement of IBC 2006, Table 1805.4.2. b. Non-Structural slab on grade.

work and observation of work being done.

c. Site work concrete where no special hazards exist. Bolts installed in concrete where indicated on drawings. . Welding except for the following: a. Welded connections made by an approved fabricator's shop need no special inspection. When Building Official allows, periodic inspections for floor and

roof deck welds and composite welded stud. b. Periodic inspection may be done as outlined on drawings. See IBC 2006, Table 1704.3. 4. High strength bolting inspection for bearing type

connections need be done only after installation. 5. Structural masonry: All masonry walls require special inspections, unless noted otherwise, and shall have a qualified special inspector present at the job site at the bealinning of every day masonry work is being performed to coordinate work and grout schedule during that day. The inspector shall also be present during the following: a. The taking of prism tests.

> b. At least one hour prior to any grout being placed to inspect rebar placement and review the quality

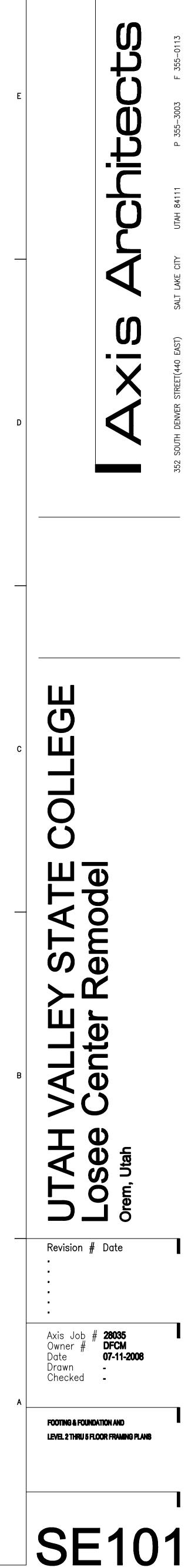
c. Grouting of all masonry work.

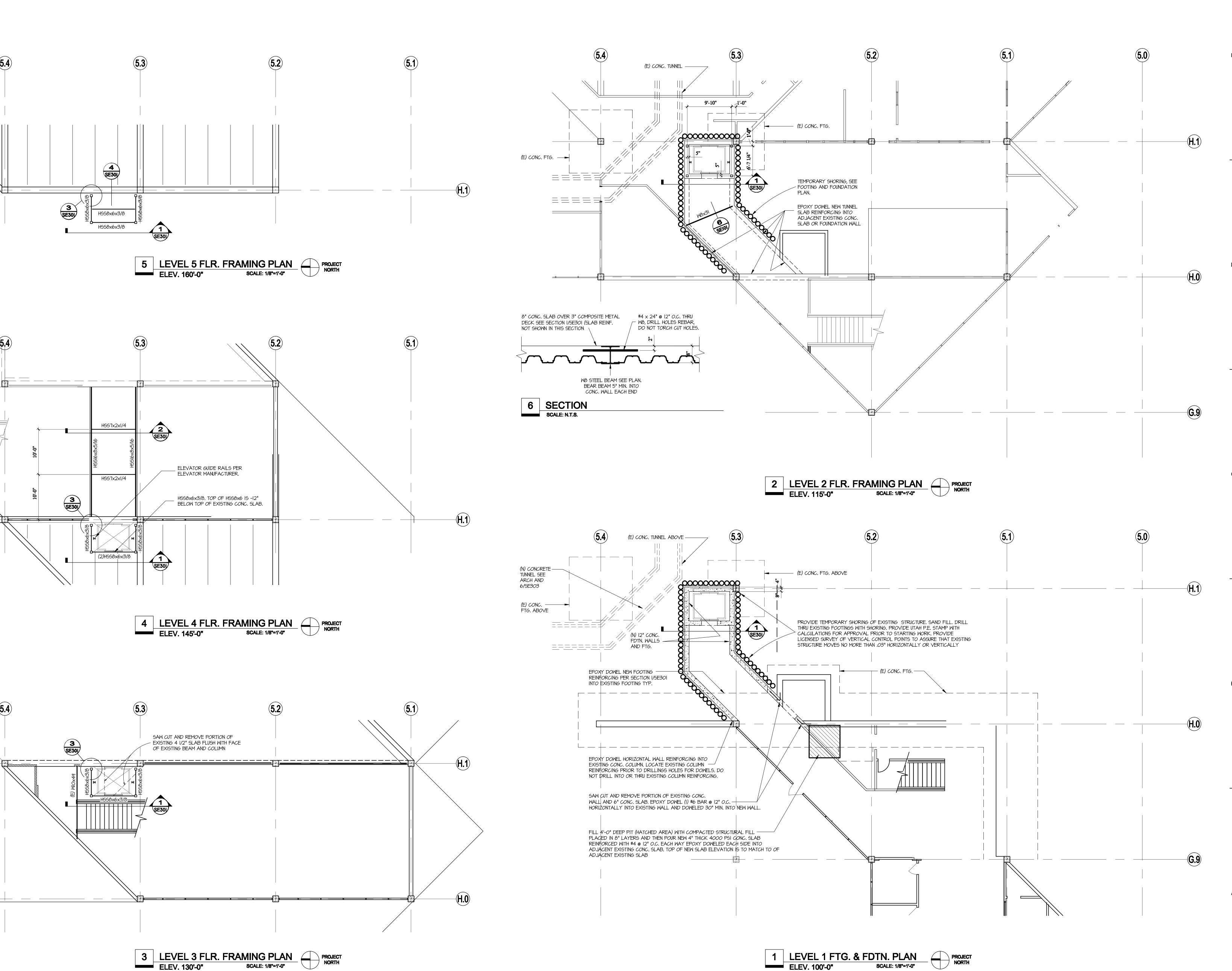
A minimum of one prism test composed of 10 specimens, 5 to be tested at 7-days and 5 specimens to be tested at 28 days, shall be made prior to any masonry construction for each masonry strength and each type of masonry unit shown on drawings. The prisms tested shall be made up of the required number of both unarouted and solid grouted masonry units. All masonry units used shall be cut (with full web member) prior to building prism. All specimens are to be made at the same time and under the same conditions. During construction contractor shall provide prism tests of three specimens for every 5000's q.ft. of each different strength of masonry wall but not less than three prior to construction. Submit laboratory mix design and prism test results to structural engineer for review. Contractor/Owner shall allow costs in his bid for masonry requiring special inspection. The special masonry inspector shall have ICBO Certification for "Structúral Masonry" or be approved by the structural engineer. The inspector should report by phone to the Architect/Engineer any work not being done in accordance with the contract documents. d. Quality Assurance Program shall meet the

requirements of Level 2 Quality Assurance shown on Table 1.15.2 of ACI 530.05/TMS 402-05. 6. Section 1707. Special inspections for seismic 7. All rebars and threaded rods epoxy doweled into concrete

C. Structural tésting for seismic resistance, see Section 1708 of the IBC 2006. D. Structural observations shall be done according to Section 106.3.4.1. All the seismic resisting elements shall be inspected, including footings.

and/or grouted CMU.





ENTRY ROOF FRAMING PLAN

SOLE: INF-PC

SOLE: INF-PC

TO ADELCY HOR CONCRETE BRAND

ENTRY ROOF FRAMING PLAN

SOLE: INF-PC

THE SOLE: INF-PC

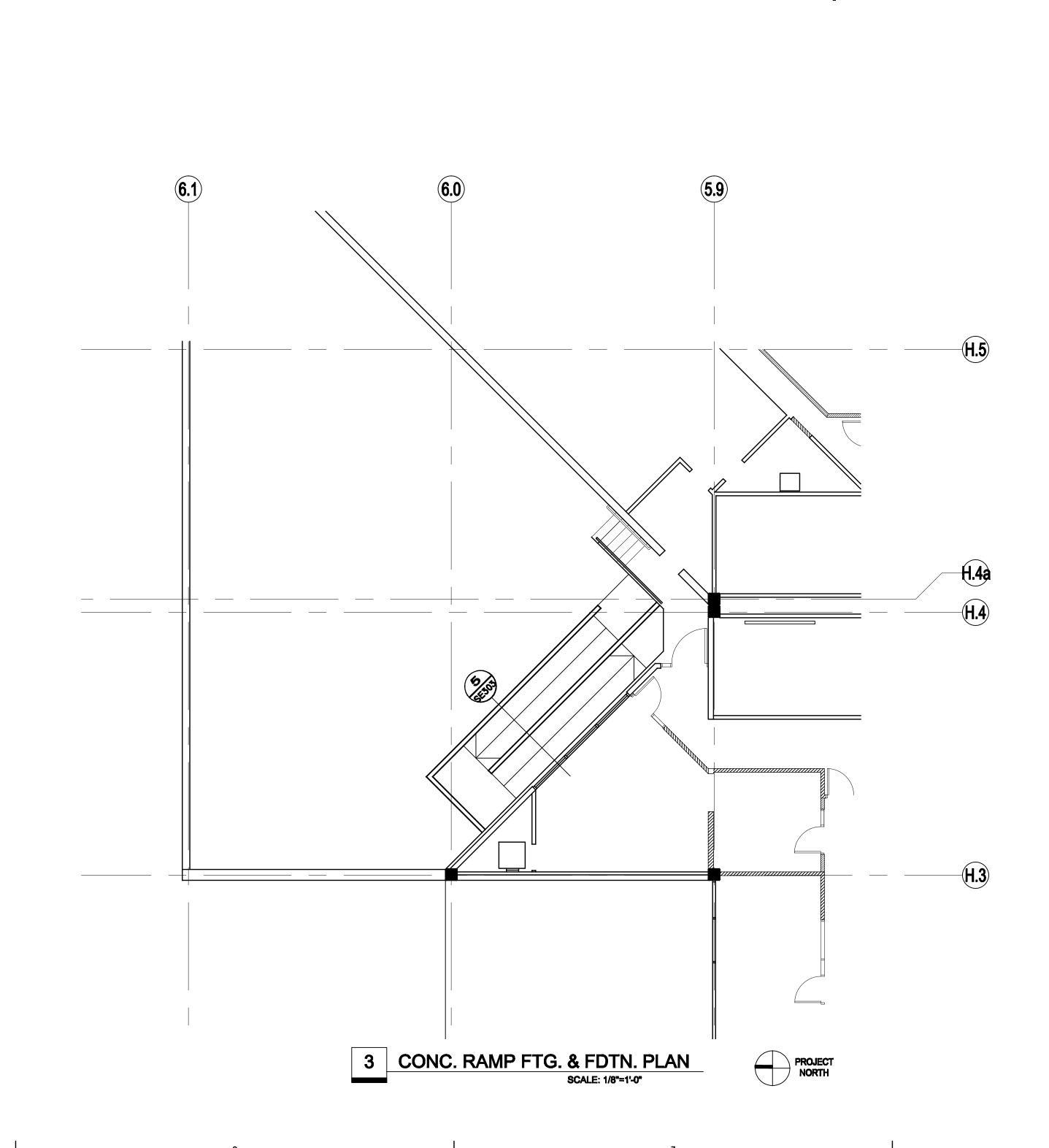
|-----

EPOXY DOWEL VERTICAL AND
HORIZONTAL WALL AND FOOTING
—— REINFORCING INTO EXISTING
CONCRETE FOOTINGS AND
COLUMNS. DO NOT DRILL INTO
EXISTING COLUMN REINFORCING

1 ENTRY FTG. & FDTN. PLAN SCALE: 1/8"=1'-0"

(E) CONC. FTG.

PROJECT



Axis Job # **28035**Owner # **DFCM**Date **07-11-2008**Drawn Checked -

FOOTING & FOUNDATION AND

LEVEL 2 FLOOR FRAMING PLANS